

APR 23 1942

# FISHERY MARKET NEWS

MARCH 1942

ISSUED BY THE  
UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF FISHERIES  
WASHINGTON, D. C.

UNITED STATES  
DEPARTMENT OF THE INTERIOR

HAROLD L. ICKES, Secretary

FISH AND WILDLIFE SERVICE

IRA N. GABRIELSON, Director



# FISHERY MARKET NEWS

R. H. Fiedler, Editor

F. F. Johnson, Associate Editor



TECHNOLOGY - - J. M. Lemon  
STATISTICS - - - E. A. Power

MARKET NEWS - - A. W. Anderson  
MARKETING - - - - Ralph Russell

Applications for FISHERY MARKET NEWS, which is delivered free to members of the fishery industry and allied interests, should be addressed to the Director, Fish and Wildlife Service, United States Department of the Interior, Washington, D. C.

The Service assumes no responsibility for the accuracy of material from outside sources.

## TABLE OF CONTENTS

	Page
Summary.....	1
Trends of fishery trade.....	2
Retailing Fresh Fish in Five Cities of the Upper Ohio River Valley, by Ralph Russell and Keith O. Burr.....	3
The Fisheries of Florida during 1941, by George W. Long.....	7
Receipts of Fishery Products at Chicago, 1941, by E. C. Hinsdale.....	8
The Production of Fishery Products in Alabama, Louisiana, Mississippi, and Texas during 1941, by C. E. Peterson.....	12
Fats, oils, and oil-bearing materials in the United States.....	13
Service's Division sponsors demonstrations.....	14
Closed season set for shrimp in Louisiana waters.....	14
Wholesale and retail prices.....	14
January New England vessel landings only 15 million pounds.....	15
Rosefish catch reaches 139 million pounds in 1941.....	15
Fisheries of Massachusetts.....	16
Shrimp receipts at Chicago show marked decline.....	16
Fisheries of Washington.....	17
Frozen fish trade.....	18
Holdings of frozen fish remain above normal.....	18
Freezings of fishery products 13 percent below last year.....	18
Boston cold-storage holdings less than 8 million pounds at end of February.....	19
New York cold-storage holdings drop 12 percent in February.....	20
February Chicago cold-storage holdings above January level.....	20
Canadian stocks of fresh frozen fish decline 3 million pounds in February.....	20
Canadian freezings of sea herring continue heavy.....	21
Canned fish trade.....	22
Unsold salmon stocks in canners' hands very low.....	22
Prices for only a few varieties of canned salmon quoted.....	22
Shrimp pack nominal in February.....	23
California pack of canned tuna down 70 percent.....	23
California sardine pack 5,011,000 cases on February 27.....	24
British Columbia canned herring pack passes 1½ million cases.....	24
Foreign fishery trade.....	24
Fisheries of Newfoundland.....	24
The Irish Moss Industry of Massachusetts, by Melville J. Fraser.....	25
The cover page.....	28
Fish meal and fish scrap under maximum prices in Revised Price Schedule No. 73.....	29
Fishery trade indicators.....	30

# FISHERY MARKET NEWS

A REVIEW OF CONDITIONS AND TRENDS OF THE COMMERCIAL FISHERIES

March 1942

Washington, D. C.

Vol. 4, No. 3

## SUMMARY

### Special Articles

Retailing Fresh Fish In Five Cities of the Upper Ohio River Valley.--Evidence indicating that inadequate attention to retail marketing methods may be greatly responsible for low seafoods' consumption, especially in inland areas, the authors undertook this special survey in selected cities: Pittsburgh, Pa.; Cincinnati and Columbus, O.; Indianapolis, Ind.; and Louisville, Ky. Schedules obtained from 1,480 stores bolster conclusion "that the volume of sales varied with the amount of effort devoted to merchandising fish."

The Fisheries of Florida During 1941.--The industry was "below par" in 1941, compared with recent years: although fishing effort was more intense, supplies were scarcer, and market prices lagged behind production costs.

Receipts of Fishery Products at Chicago, 1941.--Total receipts of about 65½ million pounds at Chicago represent a 10 percent boost above 1940's record.

The Production of Fishery Products in Alabama, Louisiana, Mississippi, and Texas During 1941.--About 3 million standard bushels of oysters plus 100 million pounds of other fishery products indicate an increase of about 2 percent over 1940 figures.

The Irish Moss Industry of Massachusetts.--Revived activity in this century-old industry is laid to the War. Hundreds of industrial products now must depend largely on Scituate's annual harvest, for this coastal village still supplies the bulk of our domestic output.

### Fresh Fish

During the last week of February, the all-commodity index of wholesale prices for nearly 900 series rose 0.3 percent, to 96.8 percent of the 1926 average--the highest level reached since September 1928.

Three-port landings (Portland, Me.; Boston and Gloucester, Mass.) totaled close to 15.4 million pounds in January, worth about \$879,000 to fishermen--the smallest reported for any month in recent years.

Rosefish continue their phenomenal rise, over 139 million pounds, worth about \$2.8 million to the fishermen, having been produced in 1941.

Chicago receipts in January showed a 5 percent drop from the previous month, due largely to an over-all 38 percent decrease in shellfish--especially shrimp, which declined almost one-half in shipments.

Receipts of soupfin shark livers at Seattle for the two-week period ending March 7 totaled 103,000 pounds--nearly 19,000 pounds over the total for all of 1941! Although this fishery dominates the Washington scene, signs point to a looming scarcity of supply off the coast.

### Frozen Fish

Holdings of about 82½ million pounds of frozen fishery products in domestic cold-storage plants on February 15 represent a 15 percent increase over the same date last year and are 26 percent above the 5-year average on that date. Freezings for all species (6½ million pounds) dropped 13 percent under the 1941 total for mid-January to mid-February, however, and were a quarter less than for the previous month ending January 15.

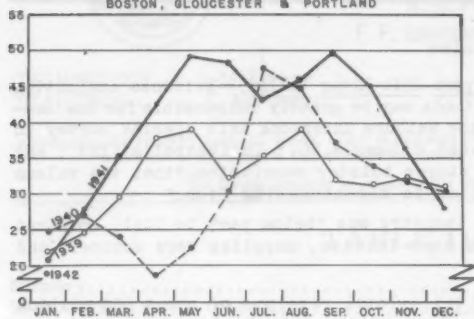
### Canned Fish

Canners' unsold stocks of salmon dropped another 56 percent during February, with a little over 130,000 cases on hand at the month's end.

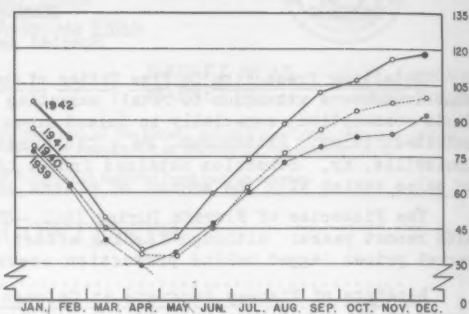
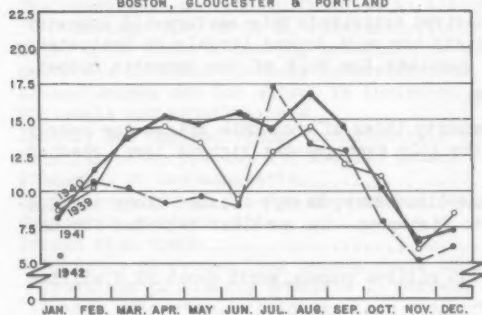
The shrimp pack in February declined 24 percent under the 5-year average; the January tuna pack, 70 percent below December; the mackerel pack, in January, increased 11 percent over December. On February 27, the California sardine pack was over 5 million cases, however--a new record.

## TRENDS OF FISHERY TRADE

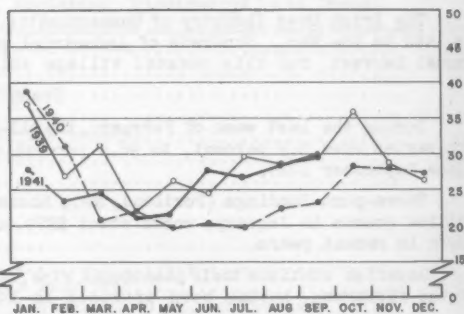
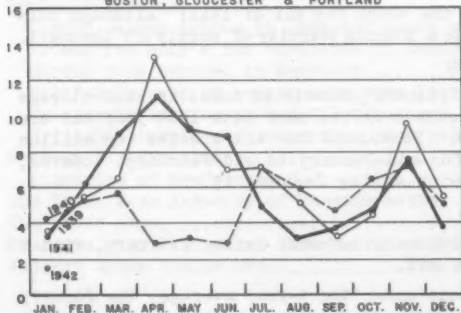
In millions of pounds

VESSEL LANDINGS, ALL FRESH FISH  
BOSTON, GLOUCESTER & PORTLAND

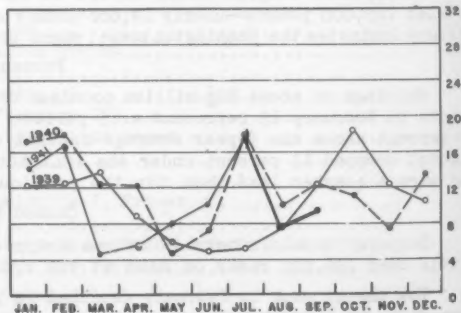
DOMESTIC COLD-STORAGE HOLDINGS OF FROZEN FISH

VESSEL LANDINGS, FRESH HADDOCK  
BOSTON, GLOUCESTER & PORTLAND

IMPORTS OF EDIBLE FISHERY COMMODITIES

VESSEL LANDINGS, FRESH COD  
BOSTON, GLOUCESTER & PORTLAND

EXPORTS OF EDIBLE FISHERY COMMODITIES





## RETAILING FRESH FISH IN FIVE CITIES OF THE UPPER OHIO RIVER VALLEY

By

Ralph Russell, Fishery Economist

and

Keith C. Burr, Assistant Fishery Economist

Division of Fishery Industries

U. S. Fish and Wildlife Service

Considerable evidence indicates that some of the most serious economic problems of the fishery industries relate to the retailing of fresh fish.<sup>1/</sup> One indication is the relatively low consumption of fishery products, especially in inland areas. Another is the widespread custom of serving fish only on Friday, thus concentrating the demand for seafoods in retail stores on one or two days of the week. Then, too, it is a common observation that many retailers do not give fishery products the detailed attention and emphasis accorded some other foods. Perhaps of even greater importance is the general lack of public knowledge concerning fish. A considerable proportion of the consuming public is not well-informed on such subjects as the great variety of species and forms available, the many methods of preparation, and the nutritional elements available in various fishery products.

Many difficulties pertaining to the retailing of fish tend to reinforce one another, so that they are self-perpetuating. That is, consumption of fish may be low because housewives are not familiar with more than a few species, or know only one or two methods of cooking fish. It then follows that because the consumption, and consequently the sale, of fish are low, the retailer thinks of fish sales as relatively unimportant and is not inclined to give this food particular attention, either in meticulous handling or by promotional activities. This lack of attention in turn undoubtedly has a share in the responsibility for the low consumption of fishery products.

As one step in an approach to the solution of retail marketing problems, the Service undertook in the spring of 1939 a survey of stores retailing fresh fish in cities located in the eastern third of the United States. This study was planned to explore the situation in regard to the retailing of fish and to provide some of the basic information necessary to a general effort to solve the many economic problems arising in this field.

Agents of the Service collected data from food stores in 56 cities during the course of the study. From stores which handled fresh and frozen fish regularly, data in considerable detail were requested on various aspects of the fish business, such as volume of sales, species of fish handled, sales methods, fish handling practices, and equipment devoted to selling fish. From dealers who handled no fresh fish or who handled it irregularly, only a small amount of general information was sought.

The present report is a summary of an analysis of the retailing of fresh fish in 5 large cities of the Upper Ohio River Valley. The cities are Pittsburgh, Pennsylvania; Cincinnati and Columbus, Ohio; Indianapolis, Indiana; and Louisville, Kentucky. The data which provide the basis for this report were obtained from retail food stores in these cities by three investigators during the spring of 1939.

Schedules were obtained from 1,480 stores in the 5 cities under consideration. Some 84 percent of these stores were combination groceries, 5 percent groceries without meat, 9 percent meat markets and fish markets, while 2 percent could not be classified in any of these groups. As compared with the 1939 census data for these cities, the sample consisted of a greater proportion of combination groceries and a smaller proportion of groceries without meat. The percentages representing the total number of meat and fish markets corresponded closely.

The 1,480 schedules were of two types. The first represented dealers who either handled no fresh fish, handled it at irregular intervals, or refused to give detailed information. From these stores only a small amount of general information was obtained. The 737 stores falling in this group were principally independent or voluntary chain stores, handling both groceries and meats. Only about 12½ percent of these 737 stores handled fresh fish at all.

<sup>1/</sup> As used in this report, "fresh fish" is a broad term including both fresh and frozen fish, shellfish, and crustaceans.

Even fewer, about 7½ percent, reported sales of cured fish, although nearly all of them handled canned fish, such as salmon, sardines, and tuna. A very limited number of these stores handled frozen fish from low-temperature cabinets.

The second and more detailed type of schedule was utilized for 743 stores which handled fresh fish regularly, and the data received from these stores provide the principal basis for this report. Of the 743 stores reporting the regular sale of fresh fish, 58 percent were classified as independent or members of voluntary chain store organizations; 35 percent were corporate chain stores; and 7 percent were fish markets.<sup>1/</sup> By kind of business, about 84 percent were combination groceries; 2 percent groceries without meat; 4 percent meat markets; 7 percent fish markets. About 3 percent could not be classified in any of these categories.

The retailing of fresh fish in the Upper Ohio River Valley was typically a small-scale business and apparently a side-line activity, except in those stores which handled fish exclusively. While meat markets and fish markets were important retail distributors of fish, combination grocery stores provided the most numerous outlets for this food.

Typically, combination grocery stores utilized only a single display for fish, and this display was ordinarily in a standard refrigerated showcase which was also used for meat. In the cities studied, from 40 to 50 percent of the stores surveyed used a maximum of not over three feet of their showcases for fish during the week, and relatively few, except fish markets, used as much as eight feet.

Most cases used for displaying fish were stationary and closed, had glass fronts, and the fish were clearly visible to the customers. The use of decorative materials in fish displays, however, was relatively uncommon in all cities. Twice as many independent stores used mechanical refrigeration as used ice, while chain stores generally used ice for refrigerating their fish displays, and fish markets used ice almost exclusively. The adequacy of the refrigeration of displays was rated either good or fair in practically all of the stores surveyed.

About 45 percent of the stores displayed fish only one or two days per week. Some inter-city variation was indicated, however, for in Indianapolis, Cincinnati, and Columbus about half of the stores surveyed displayed fish for five or six days of the week. In the other cities a much smaller percentage of stores maintained a fish display five or six days per week.

Besides display cases, other equipment used for handling fish included cleaning, butchering, and scaling equipment, which was encountered in about one-fourth of the stores, and storage facilities which were present in about half of the stores. However, many stores had no need for either of these types of equipment, as they handled only prepared packaged fishery products for a limited period during the week. Storage equipment usually consisted of walk-in coolers, except in fish markets, where bins and boxes were most frequently used for storage purposes.

Except in fish markets, ventilation in most of the stores was considered satisfactory, so that unpleasant odors did not discourage customers from buying fish. Larger percentages of the fish markets, however, were not adequately ventilated.

The advertising of fish by the stores of all cities was relatively limited. Indications are that most of the third of the stores which advertised fish in newspapers, circulars, and other media spent only small amounts for this purpose. In all but one of the cities studied, less than half of the stores had signs or placards advertising fish on the outside of the store. As for signs on the inside of the store, very few of the Indianapolis, Louisville, and Pittsburgh stores called attention to fish in this way. In Columbus and Cincinnati over half of the stores used signs on the inside to advertise fishery products. However, even those stores which were provided with signs and placards, either on the inside or outside of the store, customarily had only one or two small signs devoted to advertising fishery products.

The stores in Columbus and Cincinnati used species lists, price lists, and price tags more frequently than the stores in any of the other three cities. Approximately 54 percent

<sup>1/</sup> For the remainder of this report voluntary chain stores will be included in independent stores, since they are usually independently owned and operated.

of the stores surveyed reported the use of two wrappers for fish, while the remaining stores used only one. The delivery of fishery products was reported by from 24 to 47 percent of the stores, but this practice was ordinarily followed only by independent stores and fish markets, with few of the chain stores offering this service to their customers.

The average volume of fresh fish of all stores surveyed was around \$43 per week. Approximately 46 percent of the stores sold less than \$10 worth of fish per week, and about 33 percent sold between \$10 and \$30 worth. Only about 20 percent had fish sales amounting to over \$30 per week. Independent stores averaged about \$22 per week, fish markets \$293, and chain stores about \$31 per week. Independent stores fell primarily in the lowest volume group, \$10 or less per week; but about 25 percent were in the \$10 to \$30 group, and a few in the \$30 and over group. About half of the chain stores fell in the medium volume group, \$10 to \$30 worth of fish per week; and the other half was about equally divided between the \$10 and less group and the \$30 and over group.

A majority of stores reported that typical unit purchases by customers averaged between 1 and 2 pounds in weight and between 20 and 35 cents in value. Generally speaking, the average unit purchases weighed less than 1 pound more frequently than over 2 pounds and were valued at less than 20 cents more frequently than over 35 cents. As shown on Table 1, fish sales were concentrated on Thursday, Friday, and Saturday, with nearly half of the total weekly sales on Friday alone.

TABLE 1

## Percentage of Fresh Fish Sales Made on Each Day of the Week

City	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Unreported
Pittsburgh	4	6	12	26	47	5	-	-
Louisville	4	5	6	11	63	10	1	-
Columbus	6	6	7	18	46	16	-	1
Cincinnati	3	3	5	19	55	13	1	1
Indianapolis	5	8	7	17	38	24	1	-
All cities	4	6	9	22	49	10	-	-

Sales of cured fish were reported by about one-third of the stores and were relatively small in all cities. Annual canned fish sales averaged \$344 for independent stores, and \$1,330 for chain stores. Very few fish markets reported canned fish sales.

As indicated in Table 2, oysters were handled by approximately 88 percent of the stores surveyed and were sold by a greater number of stores than any other species of fish or shellfish. Haddock was second, sold by approximately 84 percent of the stores. Other leading species were lake herring, blue pike, and halibut. About equal amounts of fish were sold as fillets and whole fish, with steaks and other ready-to-cook forms representing smaller proportions of the total. The percentage of total fish volume sold in various forms is indicated in Table 3.

TABLE 2

## Percentage of Stores Handling Various Species of Fish and Shellfish

Species	All Cities	Pittsburgh	Indianapolis	Louisville	Cincinnati	Columbus
<b>Salt water:</b>						
Haddock	84	85	66	78	90	89
Halibut	53	66	32	12	67	49
Rosefish	36	17	56	51	43	52
Whiting	18	5	40	36	31	6
Croakers	16	25	-	5	19	12
Pollock	10	1	13	17	14	26
<b>Fresh water:</b>						
Lake herring	59	50	44	2	96	82
Blue pike	52	21	25	60	1	7
Catfish	28	1	54	49	49	50
Whitefish	14	20	5	14	10	8
Carp	10	9	17	9	14	6
Buffalofish	7	-	26	22	9	-
<b>Shellfish:</b>						
Oysters	88	77	98	95	95	96
Shrimp	13	9	15	16	18	12
Scallops	9	6	2	11	12	20
Lobsters	7	1	3	9	15	16

TABLE 3

## Percentage of Fresh Fish Volume Sold in Specified Forms, by City and Type of Store

City and Type of store	Whole	Fillet	Steak	Other ready-to-cook	Unreported
Pittsburgh	50	39	9	2	-
Louisville	54	34	5	7	-
Columbus	35	62	3	-	-
Cincinnati	44	51	5	-	-
Indianapolis	53	43	3	-	1
All cities	47	45	6	2	-
Independent	45	46	7	2	-
Fish	63	28	6	3	-
Chain	23	71	5	1	-

Much of the data indicated that the volume of fish sales was directly related to the amount of emphasis given to this commodity by retail dealers. Those stores which displayed fish several days a week or throughout the week were in the higher volume groups more frequently than those displaying fish for one or two days only. Other practices associated with stores in the higher dollar-volume brackets included advertising in newspapers and other circulating media, the display of signs and placards inside and outside the store, the use of species lists and price lists, and the use of price tags in the fish displays. Many dealers expressed the opinion that fish sales could be increased by giving more time and attention to making fish displays attractive and by providing clerks with general information about the species handled, so that they could talk intelligently to the housewife about fish, and especially about how to cook it.

While many of the stores handling fish followed some of the desirable practices recommended, very few had a well-integrated program designed to stimulate fish sales. The evidence is fairly clear in showing that the volume of sales varied with the amount of effort devoted to merchandising fish. Since profits on fish compare very favorably with profits in other lines, it would appear to be to the advantage of the retailer to promote the sale of fish by giving the time, energy, and attention which this item deserves but does not always receive.

0-0-0

## THE FISHERIES OF FLORIDA DURING 1941

By

George W. Long

Junior Fishery Marketing Specialist

Division of Fishery Industries

U. S. Fish and Wildlife Service

It is generally conceded that 1941 was not a good year for dealers and fishermen operating in Florida.

The number engaged in the industry noticeably decreased because of the War, and this further aggravated conditions which were already none too good. Some branches of the industry showed improvement, particularly those concerned with the processing of menhaden, and the production of crab meat and scallops. In the main, however, the industry was below par compared with recent years. Generally, fishing on both coasts in 1941, was more intense; faster boats were in use and nets were longer and deeper--two facts clearly indicating that fish were not as plentiful as usual.

On the west coast occurred one of the largest runs of mullet ever experienced in that area. Dealers were loaded with quantities which they could not market profitably, and the mullet fishermen lost time through not being allowed to fish regularly. Catches of other species were just fair all along the west coast, however, and market prices did not seem to advance comparably with the increased costs of production.

At Tarpon Springs, sponge boats operated profitably, but the catches were below normal. This was offset, though, by the fact that the exceedingly good demand for sponges created a high price. However, in the Keys area, the sponge industry was practically at a standstill. The sponge blight, which first became seriously evident in 1939, depleted the beds to such an extent that it is no longer profitable to fish; and the number of boats and men engaged in taking sponges in this section has been reduced by approximately 75 percent.

The east coast still suffered from the effects of the freeze which struck in 1940, and the catches of Spanish mackerel, king mackerel, bluefish, and pompano were below normal. In this section this fact, of course, was a deciding factor in the decrease in the number of fishermen.

Those engaged in catching and handling king mackerel in the Keys enjoyed a profitable season during 1941, because the local run was not greatly affected by the 1940 freeze. With little competition from dealers located elsewhere, the demand for this species was very good and prices remained fairly high and steady.

Market prices for shucked oysters were higher than usual; but the quantity available was so scarce and the yield per bushel so low, that the season was not a particularly profitable one. Pine Island Sound, the source of scallops for Ft. Myers dealers, produced a large volume which shucked out well and sold at a steady price.

Crab meat producers had a good year. There was a slight scarcity, but the yield in meat was fair, and prices per pound were consistently good. Several prospective packers took out licenses to operate crab meat producing plants during 1942, most of them contemplating operations in the East Point area.

Some experimentation was conducted with deep-water fishing traps on the west coast. One dealer located in that area constructed fifty traps measuring 7' x 5½' x 2½', of heavy



1½" mesh wire, attached to a heavy wooden frame. To these were fastened a rope leader long enough to allow each trap to be placed on the bottom in about 40 feet of water. They were dropped about 15 miles offshore in the Gulf of Mexico. In about five weeks of fishing, an appreciable quantity of blue runner was taken. Because no other species was caught, however, and because so many of the traps came loose from the buoy line, the method was discontinued; but since nets and other fishing gear may become scarce, it is possible that the experiment may be revived. Baited traps placed at different depths, rather than unbaited traps on the bottom, may give better results.

The area encompassing the Keys showed no appreciable change with regard to taking of crawfish and stone crabs except for some decrease in the quantity produced. The loss of traps, due to unfavorable weather conditions and interference by heavy marine traffic, was reported to be exceedingly heavy.

Shark fishing, carried out principally at Salerno, Ft. Pierce, and Lower Matecumbe Key, made slow progress. Although the price for shark-liver oil was much better, fishing costs were high. Rough weather limited shark fishing, causing the loss of many fishing days during the year and increasing operating costs. Some effort was made to create a market for shark meat as an edible food, but without marked success.

Transportation of fishery products to northern cities apparently no longer is a serious problem to the Florida dealer. Shipments leaving Florida one day arrive in many northern markets the next morning.

Marketing methods were unchanged in 1941; except that some firms tried to increase their direct sales and cut down on consignment shipments. A new market was opened for mullet, a few shipments by truck being made to dealers in Hampton, Va., who were in need of fish to maintain their usual supplies. From repeat orders, it appears that the mullet were well received. As a preference was shown for the smaller sizes, the market was of added value since marketing the smaller mullet has always been a serious problem for the Florida dealer.

There was a marked decline in the 1941 catch of red snapper and groupers, and to aggravate further this condition, the dealers specializing in these species found it hard to get crews for their boats. With diminished catches, fishing on shares was less profitable than was employment elsewhere.

In the menhaden industry, also, it became increasingly difficult for the boat owners to get sufficient crews. Although menhaden were not as plentiful as they have been, the industry enjoyed a profitable season because of better prices for menhaden products.

The construction of more cold storage units in the State has been advocated so that more space will be available for the freezing of fish. One reason why the heavy mullet run did not benefit dealers and fishermen to the fullest extent was the lack of freezing facilities and storage space which forced on the market an over-supply which in turn caused a drop in price.

O-O-O

#### RECEIPTS OF FISHERY PRODUCTS AT CHICAGO, 1941

By

E. C. Hinsdale  
Assistant Fishery Marketing Specialist  
Chicago, Illinois

U. S. Fish and Wildlife Service

Total receipts for 1941 in the Chicago Wholesale Market amounted to 65,569,000 pounds, an increase of approximately 10 percent over 1940. Approximately 2,554 trucks, 1,128 freight cars, and 793 express cars, fully loaded, transported the 65½ million pounds to the various receiving stations in Chicago.

As may be observed from the following table, fresh-water fish receipts continued to predominate, increasing 5 percent in volume as compared with 1940. Salt-water fish manifested

a 33 percent gain over the preceding year due mainly to greatly increased shipments of the various frozen fillets. Shellfish varieties, however, suffered an 8 percent decline to which lesser receipts of oysters and shrimp largely contributed.

Receipts by Types of Fish -- 1941 and 1940

Item	Fresh-water fish		Salt-water fish		Shellfish, etc.		Total	
	Lbs.	%	Lbs.	%	Lbs.	%	Lbs.	%
1941	33,398,681	51	21,564,339	33	10,606,141	16	65,569,161	100
1940	31,746,777	54	16,198,298	27	11,487,482	19	59,432,557	100
Change from 1940	+1,651,904	+5	+5,366,041	+33	- 881,341	-8	+6,136,604	+10

During 1941, 101 classifications of fishery products were received. These consisted of 41 salt-water, 39 fresh-water, and 21 shellfish and miscellaneous items, originating in 34 States, Alaska, and eight Canadian Provinces. The domestic total amounted to 45,872,000 pounds or 70 percent of the total receipts, an increase of 9 percent over the preceding year. The 1941 imported total\* amounted to 19,697,000 pounds, or 30 percent of the total receipts, an increase of 14 percent over 1940.

Receipts by Methods of Transportation -- 1941

Item	Truck			Express			Freight			Total		
	Lbs.	% of Trk Total		Lbs.	% of Exp Total		Lbs.	% of Frt Total		Lbs.	% of Total	
Classifications: All	25,543,412	100	39	15,862,457	100	24	24,163,292	100	37	65,569,161	100	
Fresh-water	16,986,109	66	51	10,624,102	67	32	5,788,470	24	17	33,398,681	51	
Salt-water	6,063,780	24	28	4,049,493	26	19	11,451,066	47	53	21,564,339	33	
Shellfish, etc.	2,493,523	10	24	1,188,862	7	11	6,923,756	29	65	10,606,141	16	
Domestic	21,991,200	86	48	11,040,936	70	24	12,840,152	53	28	45,872,288	70	
Imported*	3,552,212	14	18	4,821,521	30	24	11,323,140	47	58	19,696,873	30	

\*Includes catch taken by U. S. vessels and shipped through Canada to the United States in bond.

The foregoing table indicates that the bulk of fishery products arrived in Chicago in 1941 by truck. Motor trucks accounted for 25,543,000 pounds or 39 percent; rail freight followed closely by transporting 24,163,000 pounds or 37 percent; while rail express carried 15,863,000 pounds or 24 percent. It was observed that motor trucks were utilized consistently throughout the year, good weather or bad, while the use of rail freight and rail express units fluctuated extensively. During the period from October to April, when great quantities of frozen fishery products are produced and shipped, large numbers of freight cars are consigned to the local market. Their use drops off at a gradual rate until, during the balance of the year and the season for greater productivity of fresh fishery products, rail express supplants rail freight.

It is interesting to note that rail freight during 1941 increased 24 percent over 1940, with salt-water fish shipments via freight showing a gain of 72 percent, fresh-water fish shipments, a gain of 46 percent, and shellfish shipments, a loss of 16 percent. In a similar manner, motor truck shipments showed a total increase of 20 percent during 1941 with shellfish shipments increasing 81 percent (largely fresh and frozen shrimp, frozen squid, and frozen spiny lobster tails); salt-water fish shipments gained 53 percent, and fresh-water fish shipments 6 percent. With the apparent shipping trend toward a greater use of motor trucks and rail freight for all types of fish, rail express shipments declined 15 percent, with shellfish decreasing 35 percent, salt-water fish 19 percent, and fresh-water fish 10 percent.

The trend toward motor trucks and rail freight was not limited by the source of the shipments since domestic shipments by truck increased 18 percent and by rail freight 14 percent while those by express declined 11 percent. Similarly, imported\* shipments by freight increased 38 percent, and by truck 31 percent, but shipments by express declined 23 percent.

\* Includes catch taken by U. S. vessels and shipped through Canada to the United States in bond.

The three leading species, with respect to volume in 1941, were fresh and frozen halibut, shrimp, and lake trout. These same three varieties were the leading products received during 1940. Halibut, with a total of 8,426,000 pounds increased 10 percent over 1940, accounting for 13 percent of the total receipts. Shrimp, with a total of 7,026,000 pounds, declined 7 percent when compared with the 1940 poundage, but accounted for 11 percent of the 1941 receipts. Lake trout, with a total of 6,110,000 pounds, was 2 percent over the 1940 figure and, at the same time, accounted for 9 percent of the 1941 total.

Certain trends from the utilization of fresh fishery products to frozen fishery products were clearly manifested during 1941. For example, while fresh and frozen halibut accounted for 39 percent of the total salt-water receipts, fresh stocks received declined 22 percent and frozen halibut increased 35 percent. Similarly, fresh shrimp receipts dropped 28 percent, as the frozen product gained 134 percent. Further indications of the trend to a wider demand for and greater usage of frozen fishery commodities are shown in the accompanying table.

SPECIES	PERCENTAGE CHANGE FROM 1940	
	Fresh	Frozen
Lake herring .....	- 14 .....	+ 85
Sauger .....	+ 32 .....	+ 49
Whitefish .....	- 16 .....	+ 32
Yellow perch .....	+ 15 .....	+ 62
Yellow pike .....	- 6 .....	+ 110
Cod .....	+ 58 .....	Fillets + 83
Haddock .....	+ 19 .....	Fillets + 110
Mackerel .....	+ 8 .....	+ 683
Salmon .....	- 43 .....	+ 89
Whiting .....	- 15 .....	Fillets + 503

Of the 34 States in which the 1941 domestic shipments of 45,872,000 pounds originated, Massachusetts was the largest producer with a total of 9,016,000 pounds which represents an increase of 54 percent over the 1940 figure for this State. Massachusetts accounted for 39 percent of the salt-water fish and 5 percent of the shellfish receipts during 1941. Of the eight Canadian Provinces, British Columbia led with a total of 8,282,000 pounds, an increase of 7 percent over 1940, and accounted for 38 percent of the total salt-water fish for 1941. The leading sources of production for all types of fishery products were Massachusetts which shipped 14 percent of the 1941 receipts; British Columbia, 13 percent; Wisconsin, 12 percent; Manitoba, 11 percent; Michigan, 9 percent; Louisiana, 7 percent; and Minnesota, 4 percent. Shipments from these seven points of origin accounted for 70 percent of the 1941 receipts.

Indicative of the trend toward greater supplies of salt-water fish (particularly frozen stocks) and frozen shellfish was the fact that Texas consignments increased 72 percent over 1940. In like manner, Massachusetts shipments increased 54 percent; Washington, 33 percent; and New York, 22 percent.

The demand for frozen fish of both fresh-water and salt-water varieties, with considerable emphasis on the filleted product, was brought about largely by the necessity for supplying the requirements of the United States Army and Navy, and the growing needs of the industry in the inland regions of the North-Central States, northwest, west, and southwest of the Chicago area.

From a marketing standpoint increased consumption and widened distribution in both local and outlying areas have tended to increase competition, to improve shipping and packing methods, and, at the same time, to stabilize the marketing of fishery products, notably, the many fluctuations in wholesale market prices.

## Monthly Index of Receipts of Certain Fishery Products at the Wholesale Market in Chicago, 1941.

(Expressed for each item in percentages of its greatest monthly volume.)

Item	12 months	Largest month	Percentages of largest month's receipts												
			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg
FRESH-WATER FISH															
	Pounds	Pounds													
Blue pike	238,858	90,314	-	-	-	7	100	10	12	14	21	24	75	2	29
Brook trout	4,983	950	24	61	39	31	55	7	35	72	41	100	29	29	44
Buffalofish	1,442,681	255,834	51	46	100	93	37	29	22	27	48	48	29	34	47
Bullheads	268,992	43,101	64	55	60	75	19	23	20	33	63	100	50	64	52
Carp	1,888,175	222,625	100	42	99	99	86	61	54	55	65	50	51	85	71
Catfish	305,120	48,304	27	61	4	98	71	100	70	49	62	55	25	10	53
Chubs	912,275	138,420	40	21	19	40	48	65	70	80	59	56	62	100	55
Eels	99,184	18,148	25	37	26	37	31	28	36	57	47	100	61	62	46
Lake herring	3,044,573	637,017	49	36	30	43	29	41	30	21	9	35	100	56	40
Lake trout	5,816,460	678,652	60	44	64	95	96	67	59	63	73	72	100	64	71
Pickeral (jacks)	267,729	54,565	25	18	26	100	31	43	9	18	80	61	44	36	41
Sauger	2,587,771	654,369	100	80	25	4	4	4	•	•	47	69	6	56	40
Sauger, frozen	2,314,998	922,972	23	73	100	8	3	9	6	1	-	3	9	15	23
Sheepshead	1,039,816	153,726	55	59	77	79	100	83	46	45	24	51	32	27	57
Smelt	1,790,129	652,435	5	39	62	100	2	8	14	12	11	9	6	7	23
Smelt, frozen	167,412	76,635	100	7	6	-	25	38	4	-	-	26	-	13	27
Suckers	1,097,508	147,237	62	50	70	100	43	67	73	57	59	77	49	39	62
Whitefish	2,781,426	314,040	62	65	25	68	70	100	97	77	83	86	77	76	74
Yellow perch	3,370,882	410,707	86	71	38	79	82	54	100	84	64	60	42	61	68
Yellow pike	1,688,296	241,056	75	70	50	100	69	27	29	42	84	64	39	52	58
Total, all fresh-water fish	33,398,681	3,692,543	92	100	94	92	66	59	60	55	64	76	73	73	75
SALT-WATER FISH															
Cod fillets, frozen	978,942	208,701	18	30	55	25	26	32	22	51	26	53	100	30	39
Flounders, sole, and fillets	543,691	81,325	61	37	51	57	85	51	36	55	48	48	100	40	56
Haddock fillets, frozen	1,150,676	192,540	36	24	67	19	52	91	46	100	33	41	28	66	50
Halibut	2,698,417	589,924	-	-	-	51	87	100	77	65	79	-	-	-	77
Halibut, frozen	5,727,742	978,875	44	87	88	12	6	7	24	17	40	100	76	83	49
Mackerel	300,352	50,880	3	5	-	31	85	100	75	83	58	56	39	56	54
Pollock fillets, frozen	505,230	88,315	65	29	59	29	44	32	24	100	18	36	65	70	48
Rosefish fillets, frozen	4,510,761	755,500	30	26	42	40	56	57	100	67	63	36	43	36	50
Sablefish, frozen	449,101	149,964	1	17	100	-	1	-	23	5	29	49	67	7	30
Salmon															
Chum (fall), frozen	508,243	115,428	46	44	94	51	6	-	9	-	9	33	100	48	44
King (chinook)	161,368	57,705	-	-	-	6	35	100	87	32	19	-	-	-	47
King (chinook), frozen	196,513	50,286	-	1	52	48	-	-	20	48	10	77	35	100	43
Silver	194,728	80,205	-	-	-	-	-	15	55	66	100	7	-	-	49
Silver, frozen	1,054,000	319,300	8	30	100	20	-	-	13	5	28	32	40	54	33
Snapper, red	247,694	53,875	11	24	26	11	29	48	49	35	26	23	79	100	38
Whiting fillets, frozen	633,895	128,000	40	25	56	9	22	44	24	47	100	63	49	17	41
Total, all salt-water fish	21,564,339	2,273,398	49	67	100	53	64	77	93	84	91	91	94	87	79
SHELLFISH, ETC.															
Clams, hard	21,708	75,969	31	24	31	32	91	51	100	53	60	45	30	83	53
Crab meat	45,030	6,853	100	58	81	57	45	52	61	55	45	38	31	34	55
LOBSTERS	362,166	42,167	85	69	61	72	72	65	65	57	72	100	77	63	72
Oysters, shell	717,658	212,985	41	32	36	22	-	-	•	3	22	49	33	100	38
Oysters, shucked	899,465	164,946	95	72	90	12	-	-	-	-	21	63	100	92	68
Scallops, sea	258,143	69,339	7	12	10	10	34	30	86	100	27	41	9	5	31
Shrimp	4,662,633	720,229	73	42	5	17	79	73	20	13	43	97	100	88	54
Shrimp, frozen	2,363,415	410,198	24	24	22	-	36	61	47	20	100	91	88	62	52
Spiny lobster tails, frozen	525,776	103,460	49	21	49	33	25	18	58	100	11	58	40	47	42
Total, all shellfish, etc.	10,606,141	1,451,742	69	46	35	21	63	66	41	30	64	100	99	97	61
Grand total, 1941	65,569,161	6,318,346	87	93	99	78	76	78	78	69	85	100	99	96	87
1940	59,432,557	5,991,779	68	87	84	80	86	78	70	61	82	100	97	99	83
1939	48,418,745	5,658,461	66	45	75	62	82	64	61	58	73	100	93	77	71

\* Less than 1/2 of one percent.



## THE PRODUCTION OF FISHERY PRODUCTS IN ALABAMA, LOUISIANA, MISSISSIPPI, AND TEXAS DURING 1941

By

C. E. Peterson  
Assistant Fishery Marketing Specialist  
New Orleans, Louisiana

U. S. Fish and Wildlife Service

During 1941, the Service's New Orleans Market News office reported the production of 829,727 State barrels (2,931,561 U. S. standard bushels) of oysters and 100,105,000 pounds of other varieties of fishery products in its daily reports covering only the more important production points in Alabama, Louisiana, Mississippi, and Texas. Comparative figures for oysters are not available, as data were not collected on oysters during the first part of 1940. However, the total poundage of other varieties of seafood increased approximately 2 percent over 1940, when a total of 97,830,000 pounds was reported. Actually, the production during 1941 was probably slightly less than in 1940, as more complete reports were obtained during the past year.

Production was reported in 47 classifications during 1941, 5 being fresh-water fish, 29 salt-water fish, and 13 shellfish and miscellaneous items. Shrimp was the most important species, accounting for 79 percent of the total production exclusive of oysters. Hard crab landings accounted for an additional 15 percent of this total. The most important salt-water fish were red snapper, mullet, grouper and spotted sea trout. The more important fresh-water varieties were catfish, buffalofish, and gaspergou.

The reported landings of shrimp were slightly less than during 1940. Production of hard crabs increased about 15 percent and that of salt-water fish 27 percent. The largest gains in salt-water fish were in catches of red snapper, mullet, grouper, white sea trout, and king whiting (ground mullet). Landings of fresh-water fish declined 40 percent.

As a ready means of determining the seasonal variation in the landings along the Gulf Coast throughout 1941, monthly indexes of abundance prepared from the information contained in the annual are included in the accompanying table. For each of the more important species the month during which the largest catch was made has been given a value of 100. The landings in other months have been expressed in percentages of the largest month or 100. The relative volume of each month's catch is immediately available merely by noting the relation of its index number to 100.

Wholesale prices of fishery products sold in the New Orleans French Market are frequently quoted in the daily market news report. There are no definite size standards in the Market. However, the following classifications are more or less generally used:

Red drum (Redfish)	Bulls	Over 15 lbs.	Spotted sea trout	Large	Over 1 lb.
	Medium	4 - 15 lbs.		Medium	3/4 - 1 lb.
	Rats	Under 3 1/2 - 4 lbs.		Small	Under 3/4 lb.
Black drum	Bulls	Over 15 lbs.	Shrimp (heads on)	Large	Under 18 per lb.
				Medium	18 - 35 per lb.
				Small	Over 35 per lb.
Flounders	Large	Over 1 lb.			
	Small	Under 1 lb.			

Hard crabs -- Approximately 40 lbs. per basket (bushel).

Soft crabs -- Approximately 4 lbs. per dozen.

"Common" is a term covering a mixture of fish, usually of the cheaper varieties, such as croaker, king whiting (ground mullet), mullet, sea catfish, white sea trout, spot, etc. It may also include some small specimens of more expensive varieties, such as flounders, red drum (redfish), spotted sea trout, etc.



## MONTHLY INDEX OF PRODUCTION OF CERTAIN FISHERY PRODUCTS IN ALABAMA, MISSISSIPPI, LOUISIANA &amp; TEXAS, 1941.

(Expressed for each item in percentages of its greatest monthly volume)

Item	Unit	12 Months	Largest Month	Percentage of largest month's production												Avg.
				Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	
FRESH-WATER FISH																
Buffalofish	lbs.	184,765	27,810	54	59	89	<u>100</u>	75	87	76	31	37	26	20	11	55
Catfish	"	571,780	87,860	58	51	86	<u>100</u>	73	48	34	42	40	60	29	30	54
SALT-WATER FISH																
Drum:																
Black	lbs.	120,930	21,570	93	<u>100</u>	47	59	63	82	16	5	7	6	1	81	47
Red (Redfish)	"	129,950	24,350	36	<u>100</u>	58	35	12	24	87	28	7	29	47	70	44
Grouper	"	327,510	38,110	42	63	46	76	<u>100</u>	80	74	97	64	85	77	55	71
Mullet	"	1,174,375	308,000	13	26	15	20	23	23	12	29	23	68	<u>100</u>	28	32
Sea trout:																
Spotted	"	189,325	26,670	37	21	21	21	39	61	93	52	70	96	99	<u>100</u>	59
White	"	114,265	41,170	-	*	3	*	2	24	31	<u>100</u>	62	52	4	*	23
Snapper, red	"	2,558,740	289,440	70	91	66	70	91	70	71	72	54	43	86	<u>100</u>	74
SHELLFISH																
Crabs, hard	lbs.	13,852,800	2,381,730	10	9	31	49	<u>100</u>	98	81	58	37	57	29	23	48
Crab meat, fresh-cooked	"	1,399,264	221,360	6	6	31	54	<u>100</u>	99	82	69	46	74	37	28	53
Oysters:																
For canning	bbls.	612,933	150,854	94	85	<u>100</u>	99	18	-	-	-	-	-	-	10	34
Other	"	216,794	43,480	68	55	73	32	12	3	3	3	26	51	73	<u>100</u>	42
Total	"	829,727	182,537	94	83	<u>100</u>	89	18	1	1	1	6	12	17	32	38
Sariupi:																
For canning	lbs.	37,564,800	10,404,870	22	13	*	*	2	2	-	58	55	<u>100</u>	75	34	30
Other	"	41,123,250	8,790,390	32	20	7	19	59	54	16	15	40	<u>100</u>	63	43	39
Total	"	78,688,050	19,195,260	26	16	4	9	28	26	7	38	48	<u>100</u>	70	38	34

\* Less than 1/2 of 1 percent.

NOTE:--Based on landings reported from production points listed in daily Fishery Products Reports.

O-O-O

## FATS, OILS, AND OIL-BEARING MATERIALS IN THE UNITED STATES

The U. S. Tariff Commission recently issued a report under the above title with a view to supplying the latest available statistical data pertinent to the trade in fats, oils, and oil-bearing materials which are commercially important in the United States.

The report may be obtained from the Tariff Commission, Washington, D. C., without charge.

## SERVICE'S DIVISION SPONSORS DEMONSTRATIONS

Almost 2,000 students of the Cincinnati (O.) public high schools recently witnessed first-hand a series of fish cookery demonstrations sponsored and put on by staff experts of the Service's Division of Fishery Industries.

"Our demonstrations of fish cookery have now been completed," reports the Division's technologist detailed from the College Park Laboratory to the Cincinnati area for these practical demonstrations. "We began them on February 9 and finished February 20."

"We visited nine schools and gave 40 demonstrations before classes varying from 25 to 75 students. The teachers, as well as the students were interested, and gave me every assistance. A number of them planned to follow the demonstration with lessons on fish cookery to make my information more effective."

Assisting in Cincinnati was the Service's local fishery marketing specialist who planned the entire schedule and arranged for the demonstrations. To supplement the demonstrations, Fresh and Frozen Fishery Products Reference Manuals were furnished for further use for home-economics classes in the high schools.

Preparation of the following fish and shellfish were included in the demonstrations: halibut, smelt, haddock, rosefish, oysters, shrimp, red snapper, canned salmon, and Cincinnati-smoked sablefish. An effective demonstration of a wide variety of uncooked fish for one school was also arranged. The Wholesale Association of Fish Dealers and Retail Food Chains of Cincinnati furnished all the fish and other food supplies used in the cooking school demonstrations.

## CLOSED SEASON SET FOR SHRIMP IN LOUISIANA WATERS

The shrimp season in Louisiana is closed from March 1 to April 15, according to the Louisiana State Department of Conservation. The Shrimp Act divides the waters of the State into two classes, known as inside waters and outside waters. The outside waters include the Gulf of Mexico within the boundaries of the State, a distance of 27 miles from shore. The inside waters are all the bays and sounds found along the Louisiana coast.

Some exceptions are provided by law during the closed season. Fishermen are permitted to trawl or seine for shrimp to be used for bait, for home consumption, or for local markets in outside waters, and for bait only in inside waters. Under the law, seining or trawling for shrimp may be continued even during the closed season outside the water boundary of the State, which means outside the 27-mile limit. Out of State shrimp, oyster and fishing boats are not permitted to trawl or seine for shrimp within the boundaries of the State, or within 27 miles from shore. No shrimp under 4 inches in length are allowed in possession. However, because of the War, the Conservation Department announced that the 3-mile limit would be substituted for the 27-mile limit during the closed season. The 3-mile limit was in effect in 1941, and will permit increased production if the weather is favorable.

## WHOLESALE AND RETAIL PRICES

During the last week of February the all-commodity index of wholesale prices for nearly 900 series advanced 0.3 percent to 96.8 percent of the 1926 average--the highest level reached since September 1928--according to the Bureau of Labor Statistics. In February, the index rose nearly 1 percent, and for the week ended February 28, was more than 20 percent above the same date in 1941. Except for a general 0.7 percent increase in the index for foods, however, price advances were comparatively small.

The average retail price of a one-pound tall can of pink salmon in 51 cities was 20.3 cents on January 13; 2 percent above mid-December; and 29 percent above the price for the comparable date last year. A one-pound tall can of red salmon averaged 37.5 cents on January 13, 2 percent more than in mid-December, and 42 percent above the same date last year.

## JANUARY NEW ENGLAND VESSEL LANDINGS ONLY 15 MILLION POUNDS

Fishing vessels delivering their catch to the ports of Boston and Gloucester, Mass., and Portland, Maine, landed 15,390,733 pounds of fishery products valued at \$878,811 during January. These receipts were the smallest reported for any month in recent years.

Landings at the three ports during January were 26 percent less than those for the same month last year, and 45 percent below the December deliveries. Although January landings were over a fourth less than those for the same month last year, fishermen received a greater return for their production, due to a marked increase in average price, which advanced from an average of 4.13 cents per pound in January 1941, to 5.71 cents per pound during January 1942.

The decrease in the January landings was the result of the tying up of the larger trawlers on the fifth of the month pending settlement of a controversy as to payment for war risk insurance.

## Landings by Fishing Vessels at Boston and Gloucester, Mass., and Portland, Me.

Species	January 1942		December 1941		January 1941		12 Mo. ending with Dec. 1941	
	Pounds	Cents*	Pounds	Cents*	Pounds	Cents*	Pounds	Cents*
Cod	1,568,900	8.33	3,887,596	5.22	3,314,060	5.15	75,034,291	3.56
Haddock	5,580,793	7.33	7,425,428	6.13	8,172,425	4.93	147,229,347	4.13
Hake	162,795	6.90	338,397	5.29	283,290	5.84	5,162,667	3.99
Pollock	1,441,995	5.41	7,998,871	3.21	1,661,647	3.21	33,579,895	2.85
Cusk	145,357	6.79	286,620	4.47	350,612	4.37	4,374,288	3.38
Halibut	5,548	25.44	14,005	22.31	24,458	20.74	711,197	16.05
Mackerel	980	7.76	327,375	4.57	2,185	11.99	24,896,371	2.60
Flounders:								
Gray sole	164,730	8.66	335,075	5.82	669,898	4.38	4,431,418	4.78
Lemon sole	39,475	15.83	88,360	12.52	101,411	11.30	2,382,671	7.33
Yellowtail	504,885	5.01	539,800	3.03	555,145	1.86	5,195,244	2.36
Blackback	119,215	5.97	111,070	5.61	100,595	5.54	1,275,263	4.15
Dab	149,390	5.15	337,340	4.23	207,285	3.06	3,678,201	2.95
Other	-	-	155	-	-	-	40,974	-
Swordfish	-	-	-	-	-	-	474,535	29.26
Rosefish	5,418,529	3.16	6,408,750	2.36	5,284,483	2.41	139,352,785	2.03
Tuna	-	-	-	-	-	-	144,967	6.00
Whiting	55,927	3.69	24,175	4.52	2,110	6.59	22,360,411	2.09
Wolffish	15,925	7.80	37,137	5.78	46,275	4.80	1,046,888	3.94
Scallops (meats)	6,691	37.00	19,659	31.04	6,816	20.00	1,590,436	21.57
Other	9,598	-	16,507	-	1,295	-	534,579	-
Total	15,390,733	5.71	28,196,320	4.23	20,783,990	4.13	473,496,428	3.24

\* Weighted average of prices per pound paid to fishermen.

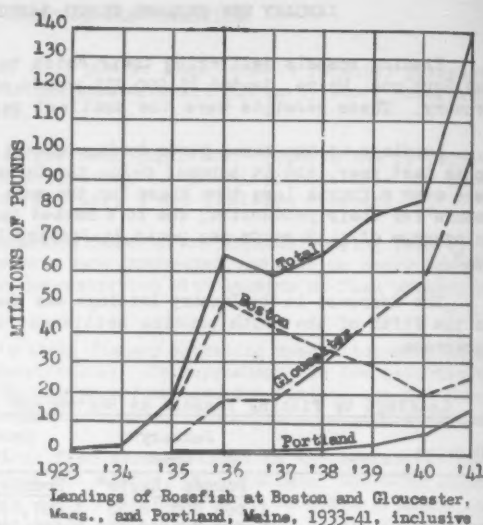
## ROSEFISH CATCH REACHES 139 MILLION POUNDS IN 1941

The rapidly growing fishery for rosefish continued to expand during 1941 when the total catch of this species landed at the ports of Boston and Gloucester, Mass., and Portland, Maine, amounted to 139,353,000 pounds, valued at \$2,831,000 to the fishermen. This was an increase of over 55 million pounds in the volume of the landings, and 1½ million dollars in their value, as compared with the previous year. It is probable that, with respect to volume, rosefish was the eighth most important species taken in the United States and Alaska

during 1941. In 1933, just prior to the period of expansion in this fishery, the catch amounted to only 250,000 pounds, and the rosefish ranked 130th among individual fishery products taken by domestic fishermen.

In the February 1941 edition of "Fishery Market News", there was published a table showing the phenomenal increase in the rosefish landings since 1933, and indicating the trend in the landings at the individual ports of Boston, Gloucester and Portland. In view of the continued expansion of the fishery during the past year, the table is being republished in order to incorporate the 1941 figures.

It will be noted that the increase in the volume of the landings during 1941 was greater than for any previous year. Gloucester continued to receive the major portion of the catch; the receipts at Boston showed a slight increase after declining since 1936; and the landings at Portland maintained the steady growth which has characterized deliveries at this port. Rosefish, which are marketed as fresh or frozen fillets, are frequently sold as fillets of "ocean perch," or "red perch." The Federal Trade Commission, however, has issued a complaint charging misrepresentation when the latter names are used. Preliminary data indicate that the production of these fillets during 1941 totaled nearly 42 million pounds as compared with 23 million pounds during the previous year.



#### FISHERIES OF MASSACHUSETTS

Rosefish vessels returning from Maine waters report plenty of fish and many of the craft have brought in deck loads, according to the February report of the Service's agent in Gloucester.

The last year or two has seen marked improvement at Gloucester in the methods of cutting rosefish and the amount that can be handled. Formerly 28 percent was considered a very good recovery, but now anything less than 30 percent is cause for investigation. During one week it was reported that the recovery of rosefish fillets in one plant reached 33.9 percent.

The mackerel seining fleet this season is expected to be one of the smallest on record. Only 3 or 4 vessels have indicated at this time that they may take aboard their seines and head southward.

#### SHRIMP RECEIPTS AT CHICAGO SHOW MARKED DECLINE

Total receipts on the Chicago Wholesale Market in January showed a decline of 5 percent as compared with the previous month, according to the Service's Chicago Fishery Market News office. Increased fresh-water fish supplies, with a 10 percent gain for the month, were more than offset by a 38 percent decrease in shellfish, mainly due to a 49 percent drop in January shrimp shipments. Shrimp receipts were also 27 percent under a year ago. Arrivals of sauger were more than double those of the previous month, a seasonal trend since February and March usually are peak months.

## Receipts of Fishery Products at Chicago

Item	Jan. 1942	Jan. 1942 compared with		Dec. 1941	Jan. 1941
		Dec. 1941	Jan. 1941		
Classification:	Pounds	Percent	Percent	Pounds	Pounds
Fresh-water fish	2,973,000	+ 10	- 12	2,706,000	3,381,000
Salt-water fish	1,930,000	- 2	+ 74	1,972,000	1,110,000
Shellfish, etc.	878,000	+ 38	- 12	1,409,000	997,000
Total receipts	5,781,000	- 5	+ 5	6,087,000	5,488,000
Leading items*:					
Lake herring	288,000	- 27	+ 7	397,000	309,000
Lake trout	276,000	- 37	- 33	437,000	409,000
Sauger	1,070,000	+111	+ 24	506,000	865,000
Whitefish	309,000	+ 29	- 26	240,000	416,000
Yellow perch	208,000	- 17	- 42	252,000	358,000
Halibut	708,000	- 13	+ 63	817,000	435,000
Rosefish fillets	311,000	+ 14	+ 37	274,000	227,000
Shrimp	457,000	- 49	- 27	888,000	625,000
Leading sources:					
Louisiana	263,000	- 61	- 51	666,000	541,000
Massachusetts	717,000	+ 3	+ 50	696,000	478,000
Minnesota	308,000	+ 68	- 5	183,000	324,000
New York	266,000	+ 4	+ 76	257,000	151,000
Wisconsin	425,000	- 37	- 8	675,000	461,000
Domestic total	3,212,000	+ 30	+ 2	4,581,000	3,278,000
Imported total	2,569,000	+ 71	+ 16	1,506,000	2,210,000
Transported by:					
Truck	1,827,000	- 24	+ 5	2,408,000	1,927,000
Express	725,000	- 13	- 9	829,000	801,000
Freight	3,229,000	+ 13	+ 17	2,850,000	2,760,000

\* Indicates fresh and frozen fish.

## FISHERIES OF WASHINGTON

During the last week in February, deliveries of soupfin shark livers to Seattle eclipsed all other developments when a total of 53,084 pounds was delivered by 37 fishing craft, according to the Service's Seattle Market News office. Included in these receipts was the record trip of 9,800 pounds delivered to Seattle by a halibut vessel on February 24. On the same day, a total of 19 fishing craft delivered 29,200 pounds of soupfin shark livers and 42,000 pounds of dogfish livers for a total estimated value of approximately \$165,000. This is by far a record day's delivery of fish livers to any one port on the Pacific Coast since the beginning of the dogfish and soupfin shark fishery.

Receipts of soupfin shark livers during the week ending March 7 continued to arrive in volume, with forty vessels of the halibut fleet delivering 44,286 pounds or 89 percent of the total soupfin shark livers landed at Seattle during the week. Between February 28 and March 2, the market for soupfin shark livers weakened materially and prices dropped from \$5.50 per pound to \$4.50, and remained at this price during the balance of the week. Receipts of soupfin shark livers at Seattle during the two-week period ending March 7 totaled 103,008 pounds, or nearly 19,000 pounds more than for the entire year of 1941. It is understood that the use of anchor gill nets, recently adopted in the soupfin shark fishery, was responsible to a large extent for the improved catches during the past two weeks. However, only a few of the boats are successful in obtaining large returns. The average catch applied to all boats in the fishery is not outstanding.

During the week ending March 14, 33 vessels of the halibut fleet delivered a total of 10,258 pounds of soupfin shark livers and 54,415 pounds of dogfish livers, in addition to the fresh fish receipts. This represented a sharp decrease in landings of soupfin shark livers as compared with the previous week's receipts of 44,286 pounds by 40 vessels of the fleet. The average catch of soupfin shark livers per boat per trip dropped to 311 pounds



as compared with a catch per trip average of 1,264 pounds for the two-week period ending March 7. In March, a fleet of over 150 fishing craft from Seattle, comprised of halibut vessels and salmon trollers using submerged gill nets, has been engaged in the soupfin shark fishery off the Washington coast. Present reports indicate that there has been a marked scarcity of soupfin sharks off the coast, after the outstanding catches made during the two-week period ending March 7. Although the fishing craft are now using a great deal more gill net gear per vessels, the returns per trip have decreased sharply.

#### FROZEN FISH TRADE

##### Holdings of Frozen Fish Remain Above Normal

Holdings of frozen fishery products in domestic cold-storage plants on February 15, which totaled 82,482,000 pounds, were 15 percent above those for the same date last year, and 26 percent greater than the 5-year average on that date, according to data furnished by the Agricultural Marketing Service of the Department of Agriculture. Holdings of practically all important marine items showed declines as compared with the previous month; however, increases were shown in the holdings of such fresh-water items as blue pike and sauger, and whitefish. Holdings of cured herring advanced during the month. Important items held in greater volume than a year ago were croakers, haddock, and rosefish fillets, halibut, mullet, lake herring, lake trout, and shrimp.

##### Holdings of Fishery Products in the United States

Item	Feb. 15 compared with						
	Feb. 15	Jan. 15	Feb. 15	5-yr. av.	Jan. 15	Feb. 15	5-yr. av.
	1942	1942	1941	Feb. 15	1942	1941	Feb. 15
	Pounds	Percent	Percent	Percent	Pounds	Pounds	Pounds
<b>Frozen fish and shellfish:</b>							
Total holdings	82,482,000	-18	+ 15	+ 26	99,979,000	71,458,000	65,628,000
<b>Important items:</b>							
Croakers	1,328,000	-40	+171	+164	2,204,000	490,000	503,000
Cod fillets	1,615,000	-33	- 20	- 4	2,414,000	2,020,000	1,678,000
Haddock fillets	4,689,000	-36	+ 13	+ 17	7,271,000	4,134,000	4,016,000
Pollock fillets	2,670,000	-35	- 46	- 37	4,079,000	4,927,000	4,243,000
Rosefish fillets	2,549,000	-21	+194	+ 4	3,218,000	867,000	2,448,000
Halibut	7,293,000	-18	+ 28	+ 70	8,909,000	5,698,000	4,282,000
Mackerel	3,994,000	-33	- 6	+ 17	5,948,000	4,259,000	3,412,000
Mullet	1,489,000	-21	+ 99	*	1,880,000	748,000	*
Sablefish	1,426,000	-16	- 33	- 11	1,698,000	2,137,000	1,602,000
Salmon	7,324,000	-17	- 2	+ 9	8,846,000	7,475,000	6,703,000
Smelt	1,833,000	+30	- 7	+ 34	1,409,000	1,974,000	1,373,000
Whiting	4,763,000	-39	- 24	- 34	7,847,000	6,274,000	7,169,000
Blue pike and sauger	1,087,000	+48	- 11	+ 45	734,000	1,219,000	748,000
Lake herring	2,283,000	- 9	+ 33	+ 38	2,520,000	1,712,000	1,659,000
Lake trout	961,000	+19	+ 18	+ 38	1,207,000	829,000	711,000
Whitefish	1,589,000	+ 6	- 22	- 4	1,501,000	2,048,000	1,661,000
Scallops	861,000	-20	- 25	*	1,078,000	1,141,000	*
Shrimp	8,420,000	- 4	+ 62	*	8,756,000	5,187,000	*
<b>Cured fish:</b>							
Herring, cured	12,075,000	+18	- 15	- 21	10,266,000	14,201,000	15,325,000
Salmon, mild-cured	5,115,000	-11	+ 49	+ 4	5,779,000	3,430,000	4,912,000

\*Data not available.

##### Freezings of Fishery Products 13 percent Below Last Year

Cold-storage plants in the United States froze 6,588,000 pounds of fish and shellfish during the month ending February 15, according to data furnished by the Agricultural Marketing Service of the Department of Agriculture. This was 13 percent less than the volume frozen in the same period in 1941, and 25 percent below the freezings for the month ending January

15 of the current year. Freezings of cod, haddock, and pollock fillets during the month showed considerable declines as compared with the same period last year. The reduction in the freezings of these items was the result of decreased landings of groundfish at New England ports during January. Two items accounted for nearly one-third of the total poundage frozen during the month--rosefish fillets, 17 percent; and shrimp, 16 percent.

**Freezings of Fishery Products in United States Cold-storage Plants**  
(Figures are for the month ending on the date indicated)

Item	Feb. 15 compared with				Jan. 15 1942	Feb. 15 1941	5-yr. av. Feb. 15
	Feb. 15 1942	Jan. 15 1942	Feb. 15 1941	5-yr. av. Feb. 15			
	Pounds	Percent	Percent	Percent	Pounds	Pounds	Pounds
Total fish and shellfish	6,588,000	- 25	- 13	+ 7	8,740,000	7,604,000	6,138,000
Important items:							
Cod fillets	60,000	- 24	- 41	- 62	79,000	101,000	156,000
Haddock fillets	168,000	- 85	- 88	- 84	1,132,000	1,417,000	1,043,000
Pollock fillets	66,000	- 88	- 75	- 80	536,000	263,000	326,000
Rosefish fillets	1,093,000	- 5	- 12	+ 9	1,152,000	1,237,000	1,006,000
Mackerel	177,000	- 27	+116	+205	244,000	82,000	58,000
Sablefish	157,000	+ 8	+1470	+303	145,000	10,000	39,000
Whiting	142,000	- 69	- 10	+ 69	460,000	158,000	84,000
Lake herring	156,000	- 49	+2500	+388	307,000	6,000	32,000
Pike (pickerel and jacks)	244,000	+187	+201	+1335	85,000	81,000	17,000
Yellow pike	115,000	+1543	+140	+248	7,000	48,000	33,000
Whitefish	177,000	+111	+ 29	+ 21	84,000	137,000	146,000
Shrimp	1,053,000	+ 6	- 17	*	993,000	1,272,000	*

\*Data not available.

**Boston Cold-storage Holdings Less Than 8 Million Pounds at End of February**

Holdings of frozen fishery products in Boston cold-storage plants totaled 7,787,000 pounds on February 25, according to the Service's Boston Fishery Market News office. This represents a decline of 30 percent when compared with January 28 and is 27 percent below February 26 a year ago. The increase in smelt holdings during February is a seasonal trend, while the much greater stocks of rosefish, as compared with the same date in 1941, reflect the record landings in this fishery during the past year.

Holdings of whiting on February 28 in 15 plants in Maine and Massachusetts amounted to 1,841,000 pounds, a decline of 447,000 pounds when compared with the holdings on January 31. The bulk of the decrease occurred in stocks of round whiting.

**Boston Cold-storage Holdings**

Item	Feb. 25, 1942	Feb. 25 compared with		Jan. 28, 1942	Feb. 26, 1941
		Jan. 28, 1942	Feb. 26, 1941		
	Pounds	Percent	Percent	Pounds	Pounds
Total fish and shellfish	7,787,000	-30	- 27	11,193,000	10,615,000
Leading items:					
Fillets:					
Haddock	438,000	-69	- 62	1,394,000	1,154,000
Pollock	1,083,000	-45	- 55	1,952,000	2,419,000
Rosefish	606,000	+23	+461	491,000	108,000
Mackerel	1,434,000	-34	- 12	2,167,000	1,635,000
Smelt	1,011,000	+72	+ 11	587,000	911,000
Shrimp	581,000	- 8	+177	633,000	210,000

## New York Cold-storage Holdings Drop 12 percent in February

Following the usual seasonal trend, holdings of fishery products in New York's cold-storage warehouses were reported down 12 percent at the end of February, according to the Service's local Market News office. Halibut stocks were well above the end of January and greatly in excess of those held a year ago. Fresh halibut from the Pacific coast will be two weeks later in arriving on the market this year since the opening of the season has been delayed to April 15.

## New York Cold-storage Holdings

Item	Feb. 26, 1942	Feb. 26 compared with		Jan. 29, 1942	Feb. 27, 1941
		Jan. 29, 1942	Feb. 27, 1941		
	Pounds	Percent	Percent	Pounds	Pounds
Total fish and shellfish	8,685,000	-12	+ 18	9,839,000	7,363,000
Leading items:					
Butterfish	506,000	-20	+125	634,000	225,000
Halibut	916,000	+25	+239	733,000	270,000
Salmon, king (chinook)	498,000	-12	- 13	565,000	570,000
Whitefish	566,000	- 3	- 54	584,000	1,241,000
Lobster tails, spiny	658,000	+33	+158	496,000	255,000
Shrimp	1,014,000	-21	+ 48	1,276,000	687,000

## February Chicago Cold-storage Holdings Above January Level

The nearly 8 million pounds of fishery products reported in Chicago cold-storage warehouses by the Service's local Market News office represent an increase of one percent during February, while holdings in the country as a whole were dropping rapidly. This increase, combined with a 30 percent decline in Boston stocks, gave Chicago warehouses almost 200,000 pounds greater holdings than the New England port, and only about 700,000 pounds less than New York City, whose warehouse holdings decreased 12 percent during the month.

## Chicago Cold-storage Holdings

Item	Feb. 26, 1942	Feb. 26 compared with		Jan. 29, 1942	Feb. 27, 1941
		Jan. 29, 1942	Feb. 27, 1941		
	Pounds	Percent	Percent	Pounds	Pounds
Total fish and shellfish	7,971,000	+ 1	+ 43	7,886,000	5,590,000
Leading items:					
Blue lake and sauger	568,000	+ 59	- 32	358,000	837,000
Lake herring	589,000	- 15	+ 46	695,000	403,000
Lake trout	482,000	- 19	+ 19	594,000	405,000
Whitefish	451,000	+156	- 9	176,000	498,000
Halibut	1,210,000	+ 26	+175	963,000	440,000
Shrimp	1,045,000	- 17	+ 37	1,262,000	763,000

## Canadian Stocks of Fresh Frozen Fish Decline 3 Million Pounds in February

Canadian cold-storage plants held 18,505,000 pounds of fresh frozen fish on March 1, 1942, according to preliminary information released by the Dominion Bureau of Statistics. This was a decline of 15 percent as compared with the previous month and of 12 percent as compared with the same date a year ago. Items showing marked declines were cod fillets, mackerel, salmon and pickerel. Holdings of frozen smoked fish were also considerably below those

for both the previous month and March 1, 1941. Stocks of smoked groundfish fillets were down 56 percent as compared with February 1, while finnan haddie and sea herring kippers showed declines of 42 percent and 32 percent respectively.

## Canadian Cold-storage Holdings

Item	March 1, 1942	March 1 compared with		Feb. 1, 1942	Mar. 1, 1941
		Feb. 1, 1942	Mar. 1, 1941		
	Pounds	Percent	Percent	Pounds	Pounds
<b>Frozen fresh fish</b>					
Total holdings	18,505,000	- 15	- 12	21,641,000	20,963,000
Important items:					
Cod fillets	423,000	- 51	- 72	868,000	1,520,000
Salmon	3,641,000	- 33	- 26	5,467,000	4,932,000
Sea herring	6,408,000	+ 20	+ 17	5,341,000	5,476,000
Halibut	1,507,000	- 46	- 16	2,792,000	1,804,000
Mackerel	311,000	+ 35	+ 70	481,000	1,036,000
Whitefish	829,000	- 2	+ 25	847,000	665,000
Pickrel	661,000	- 25	- 24	882,000	873,000
Tullibee	614,000	- 2	+ 26	626,000	833,000
<b>Frozen smoked fish</b>					
Total holdings	963,000	- 41	- 26	1,622,000	1,303,000
Important items:					
Finnan haddie	118,000	- 42	- 59	204,000	285,000
Fillets: Cod,					
haddock, etc.	364,000	- 56	- 21	821,000	463,000
Sea herring kippers	325,000	- 32	- 10	477,000	363,000

## Canadian Freezings of Sea Herring Continue Heavy

Sea herring accounted for over 60 percent of the total poundage of fresh fish frozen by Canadian freezers during February, according to preliminary information released by the Dominion Bureau of Statistics. Although total freezings during the month decreased 11 percent as compared with those during January, they were 8 percent above those for the same month the previous year.

## Freezings of Fishery Products in Canadian Cold-storage Plants

Item	February 1942	February compared with		January 1942	February 1941
		Jan. 1942	Feb. 1941		
	Pounds	Percent	Percent	Pounds	Pounds
<b>Frozen fresh fish</b>					
Total freezings	3,433,000	- 11	+ 8	3,878,000	3,189,000
Important items:					
Cod:					
Whole	52,000	- 42	- 37	89,000	83,000
Fillets	410,000	- 46	- 65	756,000	1,169,000
Haddock fillets	61,000	- 47	- 80	116,000	302,000
Sea herring	2,181,000	+ 27	+ 588	1,713,000	317,000
Halibut	209,000	- 22	- 45	267,000	379,000
<b>Frozen smoked fish</b>					
Total freezings	242,000	- 47	- 76	458,000	1,014,000
Important items:					
Finnan haddie	54,000	- 55	- 88	119,000	462,000
Fillets: Cod, haddock, etc.	127,000	- 43	- 71	224,000	443,000
Sea herring kippers	55,000	- 51	- 35	113,000	85,000

## CANNED FISH TRADE

## Unsold Salmon Stocks in Cannery Hands Very Low

At the rate the stocks of unsold canned salmon in packers' hands are dropping there will be no carryover when the new pack comes on the market. A 56 percent decline during February is evident from the figures released by the Association of Pacific Fisheries.

## Canned Salmon Unsold--Standard Cases

Item	February 28, 1942	January 31, 1942	February 28, 1941
Chinook or king	18,517	36,277	48,920
Puget Sound sockeye	16,310	20,949	27,487
Alaska red	3,284	11,479	102,646
Coho, silver, and medium red	2,407*	3,230*	68,179
Pink	40,184	139,469	165,109
Chum	47,890	79,914	41,593
Blueback	-	400	505
Steelhead	1,519	3,781	4,254
Total	130,111	295,499	458,693

\*Does not include coho tails.

## Prices For Only a Few Varieties of Canned Salmon Quoted

With the exception of pink salmon, Puget Sound sockeyes and a few chums the Seattle Fishery Market News office reported that no quotations were available, stocks of other varieties having been sold out at prices quoted on January 1 and February 2. Quotations are f.o.b. Pacific Coast shipping points.

## Canned Salmon Quotations--Per Dozen Cans

Variety	Can size	Mar. 2 1942	Feb. 2 1942	Mar. 1 1941
Fancy	1-lb. flat	-	\$4.50-5.00	-
	$\frac{1}{2}$ -lb. flat	-	2.70-3.00	-
Chinook or king (Columbia River)	1-lb. tall (fall-pack)	**	1.85	\$1.55-1.60
do	1-lb. flat do	**	2.25	-
do	$\frac{1}{2}$ -lb. flat do	**	1.25	1.00
Alaska red	1-lb. tall	**	-	2.65-2.75
	1-lb. flat	**	-	3.00
	$\frac{1}{2}$ -lb. flat	**	-	1.65-1.75
Coho and medium red	1-lb. tall	**	-	1.85-2.25
	1-lb. flat	**	-	2.15-2.35
	$\frac{1}{2}$ -lb. flat	**	-	1.35
Chum	1-lb. tall (few)	\$1.85-1.90	1.85-1.90	1.45-1.50
	$\frac{1}{2}$ -lb. flat	**	1.25	.90
Pink	1-lb. tall	2.00-2.10	2.00	1.60-1.65
	1-lb. flat	**	-	1.75
	$\frac{1}{2}$ -lb. flat	**	-	1.00-1.05
Puget Sound sockeye	1-lb. flat	4.50	4.50	3.50-3.70
	$\frac{1}{2}$ -lb. flat	2.75-3.00	2.50-3.00	2.10-2.25

\*\*None available, stocks sold out.



## Shrimp Pack Nominal in February

With less shrimp packed in February than during the same month in 1941 the total for the season did not quite reach 750,000 cases, a decline of 24 percent from the 5-year average for the same period, according to the Service's New Orleans Market News office. Figures are for those canneries operating under the Sea Food Inspection Service of the U. S. Food and Drug Administration, and generally represent over 90 percent of the pack.

## Wet and Dry Pack Shrimp in all Sizes in Tin and Glass--Standard Cases

M O N T H			S E A S O N		
1 9 4 2	1941-1942	1 9 4 1	1941-1942	1940-1941	5-yr. average
Feb. 1-Feb. 28	Dec. 28-Jan. 31	Feb. 2-Mar. 1	July 1-Feb. 28	July 1-Mar. 1	July 1-Mar. 1
15,747	42,492	24,034	746,673	909,211	979,411

Canned shrimp quotations again moved up during February as compared with the previous month. Changes were from 5 cents to 25 cents per dozen. A number of the packers reported, however, that, due to the small pack, they would not be in the market for several months. The following quotations are f.o.b. point of production in No. 1 Standard, plain tins.

## Canned Shrimp Prices--Per Dozen Tins

Item	March 1, 1942	February 1, 1942	March 1, 1941
<b>WET PACK</b>			
Small	\$1.90-2.10, few 1.85	\$1.85-2.00	\$1.10-1.20
Medium	2.00-2.25, few 1.95	1.95-2.10	1.15-1.35
Large	2.10-2.40, few 2.05	2.00-2.25	1.20-1.40
Extra Large or Jumbo	2.20-2.50, few 2.60	2.10-2.35	1.25-1.50
<b>DRY PACK</b>			
Small	\$1.90-2.10	\$1.85-2.00	\$1.15-1.20
Medium	2.00-2.25	1.95-2.10	1.15-1.35
Large	2.10-2.35	2.00-2.25	1.20-1.35
Extra Large or Jumbo	2.20-2.50	2.10-2.35	1.25-1.50

## California Pack of Canned Tuna Down 70 percent

During January, California canners packed 65,380 standard cases of tuna--a decline of 70 percent under the December figure and 45 percent less than was canned in January 1941, according to figures issued by the California Bureau of Marine Fisheries. Yellowfin tuna accounted for 78 percent of the total production during the month.

The January mackerel pack--60,310 standard cases--was an increase of 11 percent over December, but a decline of 4 percent compared with the quantity canned in January 1941.

## California Pack of Tuna and Mackerel--Standard Cases 1/

Item	January 1942	December 1941	January 1941
	Cases	Cases	Cases
<b>Tuna:</b>			
Albacore	312	30	-
Bonito	1,808	2,581	1,404
Striped	5,706	32,415	8,692
Yellowfin	50,672	159,218	84,772
Yellowtail	-	2,633	1,827
Flakes	6,882	17,445	20,497
Tonno style	-	493	1,329
<b>Total</b>	<b>65,380</b>	<b>214,815</b>	<b>118,521</b>
<b>Mackerel</b>			
	60,310	54,189	62,531

1/ Standard cases of tuna represent cases of 48 7-ounce cans, while those of mackerel represent cases of 48 1-pound cans.

## California Sardine Pack 5,011,000 Cases on February 27

A record pack of California sardines amounted to over 5 million standard cases on February 27, according to California Sardine Institute and State Division of Fish and Game figures. With the ruling of the Attorney General that the Governor's 30-day extension was illegal, the season closed in Monterey on February 15 and will close in Southern California on March 15. Landings at San Francisco ceased with the outbreak of war.

## California Sardine Landings, Canned Pack, and Byproducts

Item	Unit	M O N T H			S E A S O N	
		1 9 4 2	1941 - 1942	1 9 4 1	1941 - 42	1940 - 41
		Jan. 31-Feb. 27	Dec. 27-Jan. 30	Feb. 1-Feb. 28	Aug. 1 to-- Feb. 27	Aug. 1 to-- Feb. 28
Landings	Tons	24,656	36,979	44,597	575,374	450,023
Canned sardines (48 lbs.)	Std. cases	335,319	478,147	420,342	5,010,978	2,983,318
		January	December	January	Jan. 31	Jan. 31
Meal	Tons	4,972	3,736	10,625	81,189	65,068
Oil	Gals.	442,140	514,916	1,232,460	16,287,041	12,032,948

Canned California sardine prices, f.o.b. California shipping points, as reported to the Service's Seattle Market News office, increased 15 to 25 cents per case during February.

## Canned California Sardine Quotations--Per Case

Item	Cans per case	March 2, 1942	February 1, 1942	March 1, 1941
Tomato or mustard sauce:				
1-lb. oval	48	\$4.65	\$4.40	\$3.00-3.40
1-lb. tall	48	3.75	3.60	2.50-2.65
Natural:				
1-lb. oval	48	4.55	4.30	3.00-3.40
1-lb. tall	48	3.50	3.35	2.15-2.25

It was reported that neither sardine meal nor oil were available from producers on March 2. A year ago, sardine meal was \$52.50 per ton as compared with the present ceiling price of \$75 to \$81 per ton for meal with 65 to 70 percent protein. The ceiling price for sardine oil is 66.6 cents per gallon as compared with 42 cents on March 1, 1941.

## British Columbia Canned Herring Pack Passes 1½ Million Cases

On February 28 landings of herring in British Columbia amounted to 109,575 tons as compared with 85,587 tons on March 1 last year, according to the Chief Supervisor of Fisheries at Vancouver. The bulk of the production was used for the canned pack destined for Great Britain. The season's total, 1,543,850 standard cases, was much greater than last year's pack of 634,709 cases on the comparable date. No dry salted herring has been produced, but 9,417 tons of herring meal and 583,942 Imperial gallons of herring oil have been manufactured.

## FOREIGN FISHERY TRADE

## Fisheries of Newfoundland

Newfoundland's fisheries board reports that exports of Scotch-cured herring for the fiscal year 1940-1941 was 22,000 barrels. The season's pack was disposed of in American and Canadian markets at satisfactory prices and it is reported that contracts have been made for a slightly larger quantity for the coming season, at better prices. For a number of years all herring to the American market has been contracted for en bloc and this practice

may be extended to the Canadian market for 1941-1942. The development of the herring meal and oil industry gives promise of increasing the value of the herring fishery.

Canned codfish is a new industry, but it has not gained much headway up to the present time.

An increased demand for Newfoundland frozen fillets is said to be noticeable in both Canada and the United States; and in areas where this industry has been established, fish meal plants have been erected to take care of the unmarketable part of the fish.

#### THE IRISH MOSS INDUSTRY OF MASSACHUSETTS

By

Melville J. Fraser

Senior Fishery Marketing Agent\*

Boston, Massachusetts

U. S. Fish and Wildlife Service

Commercial "Irish moss", or carrageen (*Chondrus crispus*) is a dark purple, branching, cartilaginous seaweed found on the coasts of northern Europe and North America. Dried and bleached, it is commonly used as a supplementary item in human diet and, more widely, in connection with hundreds of industrial products.

According to historical data, it was on the shores of Galway and the Aran isles that Irish moss was first gathered in 1835. Then it commanded a price of three shillings and sixpence per pound, and the price held for a long time because people believed this pungent fruit of the sea held a cure for tuberculosis. The fad spread to America. Here, imported moss brought one dollar a pound until the same fringed seaweed found on the shores of Galway was discovered in Massachusetts at Scituate. Since 1847, when Daniel Ward found carrageen growing on its rocks, Scituate has supplied most of the moss used in America, for the domestic article soon replaced the foreign, because in every way American moss is superior to that grown in the old country. In Galway, carrageen grows mostly in "bold" or deep water, and the fibers are long and tough. Lacking sandy beaches, Irish mossers dry their product on rocks, though hot sand furnishes the best bleaching plat. Through lack of sun, Galway moss is often bleached with sulphur, which accounts for the fact that real "Irish" moss yields less gelatin than the American product.

The present war in Europe, cutting off the supply of sea moss formerly obtained from the northern coast of France, Norway and other countries, caused the demand for domestic moss to increase greatly. It is used in the manufacture of pudding, pharmaceutical supplies, skin lotion, and in an estimated several hundred industrial processes. The finished product in powder form is said to have more gelatin content than any other powder or tablet. In tremendous demand, the powder is used in the manufacture of beverages, paints, shoe blacking, medicine, confectioneries, ice cream, and countless other products. There have been reports, too, that the chemicals found in sea moss may prove valuable in the manufacture of munitions. It is understood that at the present time, War Department chemists are carefully analyzing the moss. Thus it is possible that an entirely new field may be opened for the industry.

#### The Fishing Grounds in Massachusetts

Irish moss is found in many places along the Massachusetts coast, but more particularly in the vicinity of Scituate, where the production in 1902 amounted to 500,000 pounds valued at \$22,500, according to Service records. The total production for the State was 690,000 pounds valued at \$31,050. In 1941, the value passed \$100,000.

Lynn and Nahant.--A limited amount of commercial activity for Irish moss is pursued in these two Essex County towns. In addition, one mosser in Lynn gathers kelp, a brown algae.

Gloucester.--One firm in Gloucester entered the business in May, 1941 with headquarters in Pigeon Cove, according to The Gloucester Times of September 23, 1941. By fall about a quarter million pounds of sea moss had been collected by men and boys working with 14-foot rakes, mostly from small boats. The moss is sorted, cleaned and dried in the sunlight. One partner of the firm has been investigating sea moss for several years. He used to collect it in spare time, dry it, and observe the results. He learned a good deal about processing and developed a method of drying on flakes instead of on sand, as was the custom years ago,

\*Resigned January 15, 1942.

when sea moss was gathered commercially. Naturally, sand stuck to the moss and complicated cleaning. Several buyers have appeared at Rockport during the past summer, and it is expected more will come in 1942. Two crops per year are available, but the second one is liable to be bothered by parasitic growths.

Quincy.--With Quincy Bay literally covered with moss in 1941, the mossers went out in rowboats, pulling it by hand or raking it from the ocean bed at low tide. With two tides a day, the output was considerable, according to The Quincy Patriot-Ledger of September 20, 1941.

Its mushroom growth as an industry at Quincy was due to the efforts of a single individual who had a force of men gathering it during the past summer. One day when he was at the North River in Scituate, he spotted bales of moss and upon inquiry found out what it was. "Why Quincy Bay is covered with that stuff," he remarked.

A greenhorn where moss was concerned, he collected all available information about it, then set to work in Quincy Bay, practically virgin territory. He uses a motor-boat to tow his mossers and their rowboats to the moss fields, and has from 5 to 15 rowboats in his motor convoy.

Where Scituate has wide expanses of white sandy beach on which to dry and cure the moss, Quincy has little. This disadvantage has been overcome by putting to use a section of the vast stretch of filled land in Adams Shore known as Broad Meadows. This moss is trucked to Scituate and sold to a local wholesaler.

Scituate.--The unprecedented boom in the ancient industry of sea mossaing at Scituate was described by R. Victor Stout writing in The Boston Traveler on September 9, 1941. He stated that the boom was likely to catapult Scituate once again into the national limelight.

There was a time when this seaside summer resort was identified as the ranking moss gathering center in the United States. But due to cheaper foreign moss, the fortunes of the once-famous industry, transported here more than a century ago from the rocky coasts of Old Erin, lagged to a point where even the veteran mossers admitted its death knell was just around the corner.

With the World War shutting off imported supplies of the gelatinous submarine growth, the dying industry has revived. Today the moss affords a livelihood for at least 300 natives of this little town.

According to Mr. Stout, a Chicago manufacturing concern, which uses great quantities of moss, has opened a modern factory on the site of the old Scituate proving grounds. The installation of a factory within Scituate's town limits is without precedent. Within the memory of the town's oldest inhabitants, Scituate has never boasted an industrial plant.

Meanwhile, Scituate mossers have participated in probably the greatest boom the town has ever known. In recent years, it was impossible for a mosser to eke out a living gathering the slimy, wet algae off the rocks. Today it's a minor league mosser who fails to net \$1,800 to \$2,000 for six-months' effort.

#### Industrial Practices

Methods of Collection.--An interesting commentary on the industry is the fact that mossers today are still using the same methods as did their grandparents.

All the mosser requires for equipment is a 12-foot dory, a pair of oars, a long-handled fine-toothed rake, a gallon of oil, an anchor and a creel to carry the moss from the dory to dry land. The rake is made especially for the purpose. It measures 12 to 15 inches across and has from 24 to 28 teeth 6 inches long, with a space of about 1/8 inch between the teeth. The rakes have handles 15 to 20 feet long and are used from the dories. A small portion of the crop is gathered by hand.

Two and one-half hours before ebb tide the mosser dons oilskin overalls and rubber boots and sets out in his dory. As indispensable as his pulling rake is his bottle of oil. If the wind is sufficient to ruffle the water and cut down his view of the bottom, a few drops of oil will "slick" a surprisingly large area so that the mosser may even see little crabs scuttling among the rocks.

Some of the mossers make arrangements to get a tow to the mossaing grounds behind a motor boat; while others have motorized their own dories. On the grounds, the mosser writes his own ticket. It takes a while to become an expert mosser, for there's a real knack to it.



But a mosser with a strong back and a good pair of hands is able to rake in at least 400 pounds during the two hours before and after low tide.

The actual operation finds the mosser first sprinkling oil on the water to make it clear. Then he drifts with the tide or wind, scraping the rocks as he goes. The tough job is in balancing the boat and holding it in the wind on a blowy day. This is where the old-timers have an advantage over the neophytes. The elements have much to do with one's success. Mossers seldom go out during a storm or a strong blow, and a choppy sea can make the operation exceedingly difficult. Since one can moss only  $3\frac{1}{2}$  to 4 hours on the ebb tide, it is imperative that no time be wasted.

At very low ebb the mosser forces his dory among the rocks as near shore as he can and pulls the carrageen by hand. If the crop is exhausted, he wades to other rocks which he practically strips, a practice not harmful since a rock may become almost bare of carrageen yet become completely covered again within three months. Moss gathered in this way yields a high price for food and drug purposes; that gathered for its paint or textile use lies from 1 to 14 feet below ebb tide.

Standing in his dory, the mosser pulls the long flexible rake toward himself, running the head along the surface of the rock to gather his catch of weed. After the mosser has pulled for about four hours, filling his boat to the gunwales, he takes advantage of the flood tide to make his way back to the bleaching beds.

Upon his return to shore, he packs his catch in wooden creels and carries it up to the scales where the brokers record the weight.

Processing.--In the old days, Mr. Stout reports that the moss was loaded into a hand barrow and carried into the plat, where it was spread out in a thin layer on the sand. There it was left to weather a week or so, with occasional washings in hand tubs. Day after day the carrageen turned from deep purple through wine red to straw color. Then the mosser turned and raked his harvest.

However, that was a slow process. Today, the vat cuts bleaching time to a few days. Two years ago when the moss brokers wanted a method of curing that would handle large quantities, they thought of the washing machine. Now the beach under First Cliff at Scituate is equipped with a big tank and two motors. One motor controls the continual flow of water pumped from the ocean which sprays the moss in the tank. The other turns the giant paddles that beat the moss. At any time of day from June to September one can see strong-armed lads stripped to the waist on the vat platform, forking the dripping mass into the vat, or wheeling the heaped barrows to the drying plat over two-foot walking planks of wire mesh spread on the sand. They got the idea of wire mesh on sand from the British army's experiments in desert warfare.

From the vat the moss descends to a picking table of steel mesh that runs as an endless belt. Here the moss parts with those periwinkles, crabs, fleas, and rock eels that did not come out in the vat and which left to decay in the moss would cause bacterial decomposition.

Marketing.--When the moss is thoroughly dry, it is packed tightly in burlap bags and usually held pending orders for shipment. As the orders come in from all over the United States as well as Canada and South America, the finished product is then shipped. A small percentage of the crop is sold to wholesale druggists and grocers. The larger portion is disposed of to brewers and to firms which make a specialty of brewers' supplies. The dried product being used for clarifying and importing body to beer. These purchasers usually process it themselves into powder.

Whereas a year ago buyers offered a cent a pound for moss right out of the ocean, the prevailing rate at Quincy in the fall of 1941 was 2 cents a pound. One mosser received \$154 for six days' mossaing last summer, according to The Quincy Patriot-Ledger. That figure is high for the year, but any person with a strong back and about \$55 in equipment would be doing poorly if he did not average over \$50 a week.

In 1941 several college students picked up tuition money mossaing in their spare time. Women and children piled up sizable chunks of spending money hand-pulling the moss off the rocks which bound the coast-line. Even a clergyman purchased the necessary equipment and announced his entry in the mossaing industry. The moss is out there on the rocks in great quantity and it's free for the taking.

Irish moss, was worth 7 to 17 cents a pound at Scituate, depending on its quality and whether it was sold green or cured.



The variation from year to year in the supply of Irish moss, according to earlier Service records, seems to be governed largely by the inclination of the local fishermen to engage in the business. Some seasons a large number of persons gather the seaweed, while in other years only a few are thus employed, with a consequent increase or decrease in the production. At times, however, severe storms on the coast do a great deal of damage to the fishery, tearing the seaweeds from the rocks and scattering it widespread over long stretches of the beach. The method of gathering is also destructive. In some localities the rocks are almost completely denuded, leaving such a scant growth to produce the next season's crop that the yield is necessarily light. If the rocks are not gleaned too closely in the early part of the season, it is said to be possible to get two crops in some of the warm sheltered coves, where the plant grows much faster than in the more open and exposed places. The season extends from May until September 1, the first crop usually going on the market in August.

**Moss Brokers.**--The product is sold on shore to various brokers. Each town usually has one or two that handle the marketing of the product. At Scituate, there are two principal brokers. One, a Scituate-born buyer who has been in the business since he was 14 years old, estimated that he alone will have purchased two million pounds of wet moss during the 1941 season, paying \$40,000 to moss gatherers. Another buyer has paid out additional thousands of dollars to Scituate mossers. It's a valuable industry now, and the golden vein has just been tapped.

The latter buyer began finding out about carrageen when its principal use was the fining of beer. Back in the days when families of Scituate's Irish settlers began their summer's mossing with the neap tides of spring, gathering the seaweed with home-made rakes made from old buggy springs, he began to "pull" the moss, selling his harvest in a boom market to Boston breweries. He has been experimenting all his life with the industrial possibilities of Irish moss.

There came a time when mossers began destroying their market by loading barrels of carrageen with sand and water to increase the weight. This killed its use with textile manufacturers as a filler in cotton. Months after cotton rolls came from the mills, spots would appear in the cotton, caused by sizing made from improperly cured carrageen. This act of shortsightedness was followed by the body blow of prohibition. Breweries no longer needed the potent medium of Irish moss to "fine", or free, undesirable proteins that appear when malt is brewed.

Then it was that the industry was rehabilitated by a series of developments. One was the incorporation of all South Shore mossers under one broker. The second consisted of accelerating the gathering and curing process to take the place of the old hand methods, and finally, a way of pulverizing moss was found. This is a difficult procedure, requiring filtering under pressure, but because it preserves valuable salts, putting them in convenient form for commercial use, it opened new markets for carrageen.

**Exports.**--Exports of moss have not been recorded by the Customs Service since 1923. It is probable that no exports go to Europe. It is understood that shipments to South America increased during 1941, but the brokers are not inclined to go into detail as to markets.

**Imports.**--Imports during 1941 are believed to be small. From 1923 to 1930 this country imported annually from \$324,500 to \$563,700 worth of unmanufactured moss, seaweeds, and vegetable substances, according to Customs records.

O-O-O

#### THE COVER PAGE

The alewife brook at Essex, Massachusetts, is the scene of the photograph on the cover page. The alewives are trapped in a wire enclosure in a pond in the brook, and are dipped into the unloading box as needed, according to R. H. Marchant, the Service's Senior Fishery Marketing Agent at Gloucester. Farther south in their range, alewives are known as river herring.

The Essex run, although small in comparison with many other runs in New England, nevertheless never fails each spring to attract much local and outside interest. Every Sunday and holiday during the run the main road, which is adjacent to the pond, is blocked with the cars of visitors who often have driven a great distance to see this sight for the first time.

As is customary in most of the small New England towns which have an alewife brook, the rights to take the alewives is auctioned off each spring in the town meeting hall. The one and only bid at Essex in 1941 was \$100. The person buying the rights to the run was, as in other years, protected by law from any encroachment. A fine of 25 cents an alewife is levied upon any person, other than the rightful lessee, who takes alewives from this brook and pond. The law is rigidly enforced by local police and State wardens.

Tuesdays, Thursdays and Sundays are set aside for the alewives to pass, unmolested, to the lake above to spawn. The trap gates are closed on these days and the alewives run unchecked past the enclosure. Each year this run yields in the vicinity of 300 to 400 barrels of alewives, with nearly an equal amount reaching the lake above.

The demand for alewives in 1941 was not as keen as in former years when hundreds of line trawl vessels eagerly awaited the spring run for use as bait. However, the Essex run is small enough to permit a ready disposal of all the fish taken to the few remaining trawl fishermen, at an average price of \$2.00 a barrel.

#### FISH MEAL AND FISH SCRAP UNDER MAXIMUM PRICES IN REVISED PRICE SCHEDULE NO. 73

Fish scrap, used as feedingstuffs, has been placed under maximum prices in Revised Price Schedule No. 73 as amended, according to an announcement by Acting Price Administrator John E. Hamm of the Office of Price Administration on March 28.

By the old schedule, maximum prices of fish meal alone were set on January 17, 1942. However, because of a combination of the short supplies of fish meal in the United States and increase in demand, an unusual situation developed whereby fish scrap--the raw product upon which no OPA ceiling was set at the time--actually sold at higher prices than fish meal, the finished feedingstuff.

Minor adjustments are also made in some of the maximum prices for fish meal to make the maximum prices conform with per unit protein prices established under this amendment. Below are listed the maximum f.o.b. reduction plant prices in new burlap bags:

<u>Percentage of Protein</u>	<u>Pacific Coast</u>	<u>Atlantic &amp; Gulf Coasts</u>
55	\$ 64.00	\$ 66.50
58	67.50	70.00
60	69.50	72.50
62	72.00	75.00
65	75.50	78.50
67	77.50	81.00
70	81.00	84.50

To determine maximum prices for protein levels not shown above, the percentage of protein is multiplied by \$1.16 per unit of protein for the Pacific Coast and \$1.21 per unit of protein for the Atlantic and Gulf Coasts, and rounded to the nearest half dollar (50¢).

On the basis of the OPA's own investigations and conferences with the industry, the Acting Administrator concluded that the maximum prices established by Revised Price Schedule No. 73 as amended, are consistent with the standards and limitations of the Emergency Price Control Act of 1942 applicable to a permanent maximum price regulation, and accordingly, as previously announced, have been continued in effect.

Maximum prices on fish scrap have been established at \$3.00 per ton below the price of fish meal.

## FISHERY TRADE INDICATORS

(Expressed in Thousands of Pounds)

Item	Month	Latest Month	Same month a year ago	Previous month
FRESH FISH LANDINGS				
Boston, Mass. ....	January	10,832	16,161	19,346
Gloucester, Mass. ....	do	3,668	3,728	7,903
Portland, Maine.....	do	887	895	948
Boston, Gloucester, and Portland:				
Cod.....	do	1,566	3,314	3,888
Haddock.....	do	5,581	8,172	7,425
Pollock.....	do	1,442	1,662	7,999
Rosefish.....	do	5,419	5,284	6,409
FISH RECEIPTS, CHICAGO 1/				
Salt-water fish.....	do	1,930	1,110	1,972
Fresh-water fish.....	do	2,973	3,381	2,706
Shellfish, etc. ....	do	878	997	1,409
By truck.....	do	1,827	1,927	2,408
By express.....	do	725	801	829
By freight.....	do	3,229	2,760	2,850
COLD STORAGE HOLDINGS 2/				
New York, N. Y.:				
Salt-water fish.....	February	5,294	3,688	6,059
Fresh-water fish.....	do	1,335	2,369	1,511
Shellfish, etc. ....	do	2,055	1,306	2,268
Boston, Mass.:				
Salt-water fish.....	do	6,632	9,926	9,901
Fresh-water fish.....	do	13	45	28
Shellfish, etc. ....	do	1,142	644	1,265
Chicago, Ill.:				
Salt-water fish.....	do	3,079	1,375	3,015
Fresh-water fish.....	do	3,275	3,074	3,018
Shellfish, etc. ....	do	1,372	994	1,582
Unclassified.....	do	245	147	270
United States:				
Cod fillets.....	do	1,615	2,020	2,409
Haddock fillets.....	do	4,689	4,134	7,262
Halibut.....	do	7,293	5,698	8,829
Mackerel.....	do	3,994	4,259	5,951
Pollock fillets.....	do	2,670	4,927	4,079
Rosefish fillets.....	do	2,549	867	3,214
Salmon.....	do	7,324	7,429	9,318
Whiting.....	do	4,763	6,274	7,849
Shrimp.....	do	8,420	5,187	8,775
New England, all species.....	do	13,446	19,271	21,859
Middle Atlantic, all species.....	do	21,055	13,129	21,471
South Atlantic, all species.....	do	4,723	3,513	5,857
North Central East, all species.....	do	18,595	14,971	19,069
North Central West, all species.....	do	5,129	3,785	5,664
South Central, all species.....	do	5,686	3,176	6,163
Pacific, all species.....	do	13,848	13,489	17,162

1/ Includes all arrivals as reported by express and rail terminals, and truck receipts as reported by wholesale dealers including smokers.

2/ Data for individual cities are as of the last Thursday of the month, except those for Boston which are for the last Wednesday of the month, and those for geographical areas and the total of the United States which are as of the 15th of the month.

Note.--Data for the latest month are subject to revision.

# **PRINCIPAL FISHERY FIELD OFFICES AND LABORATORIES OF THE FISH AND WILDLIFE SERVICE**

## Division of Fishery Industries

Boston, Mass. ....	B. E. Lindgren.....	253 1/2 Northern Ave. Market News Service...
Chicago, Ill. ....	E. C. Hinsdale.....	200 N. Jefferson St. Market News Service.
Cincinnati, Ohio....	C. H. Chilton.....	Palace Hotel. Market Development.....
College Park, Md. ..	J. M. Lemon.....	Fisheries Technological Laboratory.....
	K. O. Burr.....	P. O. Box 128. Market Development.....
Des Moines, Iowa....	J. J. Murray.....	207A Old Federal Bldg. Market Development
Jacksonville, Fla. .	S. C. Denham.....	309 Duval Bldg. Market News Service.....
Ketchikan, Alaska...	M. E. Stansby.....	Fisheries Technological Laboratory.....
Mayaguez, P. R. ....	J. F. Puncocchar.....	Fisheries Technological Laboratory.....
New Orleans, La. ...	C. E. Peterson.....	1100 Decatur St. Market News Service.....
New York, N. Y. ....	W. H. Dumont.....	155 John St. Market News Service.....
Cleveland, Ohio.....	F. C. Randlett.....	1883 East 93rd St. Market Development...
San Pedro, Calif. ...	C. B. Tendick.....	Post Office Bldg. Fishery Statistics....
	R. W. Harrison.....	2725 Montlake Blvd. Fisheries Technolog- ical Laboratory.....
Seattle, Wash. ....	V. J. Samson.....	417 Bell St. Terminal. Market News Service.....

## Division of Fish Culture

### Regional Headquarters:

Albuquerque, N. Mex.	Theodore S. Kibbe.....	220 West Copper Ave. Reg. #2.....
Atlanta, Ga. ....	John Blosz.....	316 Glenn Bldg. Reg. #4.....
Boston, Mass. ....	Henry C. Markus.....	1140 Park Square Bldg. Reg. #5.....
Minneapolis, Minn. .	C. F. Culler.....	500 National Building. Reg. #3.....
Portland, Oregon....	Alphonse Kemmerich.....	600 Weatherly Building. Reg. #1.....

## Division of Fishery Biology

Ann Arbor, Mich. ...	Dr. John Van Cooten.....	University Museums. Great Lakes Fisher- ies Investigations.....
Beaufort, N. C. ....	Dr. Herbert F. Prytherch.	Fisheries Biological Laboratory.....
Cambridge, Mass. ...	W. C. Herrington.....	Room A-210 Harvard Biological Laboratory N. Atlantic Fisheries Investigations..
College Park, Md. ..	Robert A. Nesbit.....	Fishery Technological Laboratory Mid. & S. Atlantic Fish. Investigations
Columbia, Mo. ....	Dr. M. M. Ellis.....	101 Willis Ave. Interior Waters Investi- gations.....
Milford, Conn. ....	Dr. Victor Loosanoff....	Fishery Laboratory. New England Oyster Investigations.....
New Orleans, La. ...	M. J. Lindner.....	Room 1609 Masonic Temple Building. Gulf Shrimp Investigations.....
Pensacola, Fla. ....	Dr. A. E. Hopkins.....	Box 1826. Gulf Oyster Investigations....
Seattle, Wash. ....	George B. Kelez.....	Alaska Fishery Investigations 2725 Montlake Blvd. ....
	Harlan B. Holmes.....	North Pacific Fisheries Investigations 2725 Montlake Blvd. ....
Stanford University, Calif.	O. E. Sette.....	Room 450-B Jordan Hall. Pilchard Inves- tigations.....

## Division of Alaska Fisheries

Juneau, Alaska.....	.....	Federal Bldg. Alaska Fisheries Service..
Seattle, Wash. ....	Clarence L. Olson.....	706 Federal Bldg. Alaska Fisheries Service.....
	(Miss) Ted Murphy.....	

## SOURCES OF FEDERAL FISHERY STATISTICS

### Fish and Wildlife Service Reports

#### Current Fishery Statistics:

Landings at Important Fishing Ports.--Monthly and annual detailed data: Landings at Boston and Gloucester, Mass., and Portland, Maine, by poundage and value, and catch by species, gear and bank; and receipts and landings at Seattle, Wash., and operations of Pacific Halibut Fleet.

Freezings and Cold-storage Holdings of Fishery Products.--Monthly and annual data on fishery products frozen and held.

Production of Manufactured Fishery Products.--Annual information on production of canned fishery products and byproducts; production of fresh and frozen packaged fish; summary of quantity and value of all manufactured fishery products; and preliminary statements on canned salmon and oyster packs and production of fresh-water mussel-shell products.

Sectional Surveys.--Annual information on number of commercial fishermen; kind and quantity of fishing gear operated; poundage and value of catch; employment in fishery wholesale and manufacturing establishments; and data on the production of manufactured fishery products for: New England, Middle Atlantic, Chesapeake Bay, South Atlantic and Gulf, Pacific Coast and Lake States, and Alaska.

#### Fishery Market News:

Market News Reports.--Daily, monthly and annual mimeographed reports on production, movement, prices, storage and canning of fishery products from 6 field offices.

Market News Review.--"Fishery Market News", a periodic current review of fishery marketing information.

#### Annual Reports:

Fishery Industries of the United States.--Review of activities of Division of Fishery Industries and summarization of Current Fishery Statistics, usually in greater detail.

### Bureau of Foreign and Domestic Commerce Reports

Imports of Fish and Fish Products.--Monthly advance statement on poundage and value of imported edible fishery products by country of origin.

Exports of Meat and Canned Fish.--Monthly advance statement on exports of canned salmon, sardines, shrimp, and other shellfish, to individual foreign countries.

Monthly Summary of Foreign Commerce of the United States.--Report on total poundage and value of fishery products imported and exported.

Foreign Commerce and Navigation of the United States.--Annual report on imports and exports with principal items shown separately.

### Bureau of the Census Reports

Production, Consumption, and Stocks of Fats and Oils.--Quarterly statement on domestic production, imports, exports, and stocks of cod and cod-liver oil, whale oil, and other fish oils.

Factory Consumption of Primary Animal and Vegetable Fats and Oils, by Classes of Products.--Advance annual report on poundage of marine-animal (whale oil) and fish oil utilized in manufacture of various edible and industrial products.

Animal and Vegetable Fats and Oils.--Annual summary combining two reports above, plus comparative figures for preceding years.

Quarterly Canned Foods Stock Report.--Information on canners and distributors stocks of canned salmon, sardines, and tuna.

### Bureau of Labor Statistics Reports

Wholesale Prices.--June and December issues contain average monthly wholesale prices of canned pink and red salmon, pickled cod and herring, salt mackerel, and smoked salmon for each of the preceding six months.

Retail Prices.--Monthly report containing retail prices of pink and red salmon.

### Tariff Commission Reports

Periodic Reports.--Include studies on specific fisheries or fishery problems.



# FRESH AND FROZEN FISHERY PRODUCTS REFERENCE MANUAL

FISHERY MARKET NEWS — AUGUST 1941 SUPPLEMENT

A reference manual containing a large volume of data concerning fresh and frozen fish and shellfish was issued as a supplement to the August 1941 issue of Fishery Market News. It was prepared primarily for use by Army purchasing officers and mess sergeants to aid them in procuring supplies of fishery products for our armed forces.

The manual contains detailed information on the following:

1. Food value, edible portion, fat content, and fuel value of fishery products.
2. Where to obtain fishery marketing information.
3. The usual market forms of fishery products.
4. The seasons for fresh fishery products in a number of producing areas and markets.
5. Standards.
6. Shipping containers.
7. Suggestions for purchasing and preparing fish and shellfish.
8. Methods of cooking.
9. Basic recipes.

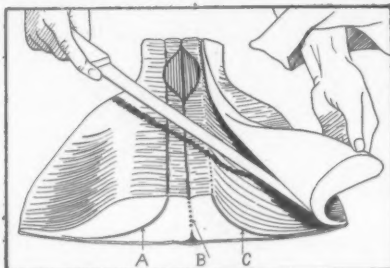
Copies of the issue containing the manual may be obtained without charge upon request from the Fish and Wildlife Service, Washington, D. C.

## MARKETING OF SHAD ON THE ATLANTIC COAST

INVESTIGATIONAL REPORT NO. 38

The season for shad has already started in the South Atlantic States. They will be at their peak of abundance in more northern States shortly. Consequently, the Fish & Wildlife Service calls to your attention the publication entitled "Marketing of Shad on the Atlantic Coast", by Fred F. Johnson of the Service's staff.

The report includes the findings of a consumer survey covering eight cities from Washington, D. C., to Charleston, S. C. This survey dealt not only with shad but fish in general and brought out the following facts, among others, concerning dietary habits of the families surveyed:



Boning shad operation No. 1

1. The average family serves an average of 51 seafood meals at home annually.

2. The average family eats 6 seafood meals at public eating houses each year.

3. The average 2-person family purchases 1.7 pounds of dressed seafood per meal; a 3-person family, 2.2 pounds; a 4-person family, 2.4 pounds; and a 5-person family, 2.8 pounds.

4. Nearly 50 percent of the 2-person families surveyed in Washington, D. C., and Richmond and Newport News, Va., purchase one pound of dressed seafood or less per meal.

5. Nearly 38 percent of the 3-person families surveyed in the same cities purchase one and one-half pounds of dressed seafood or less per meal.

The small size of the average purchases of fish by small families is most significant in view of the fact that 44 percent of this country's families consist of those of two and three persons.

In addition to discussions of the shad fishery and trade in shad products, the report includes tested recipes for preparing shad and shad roe, and describes a method for boning shad, two illustrations of which appear above.



Boning shad operation No. 2

This report may be obtained from the Superintendent of Documents, Government Printing Office, Washington, D. C., for 10 cents, by requesting Fisheries Investigational Report No. 38.

